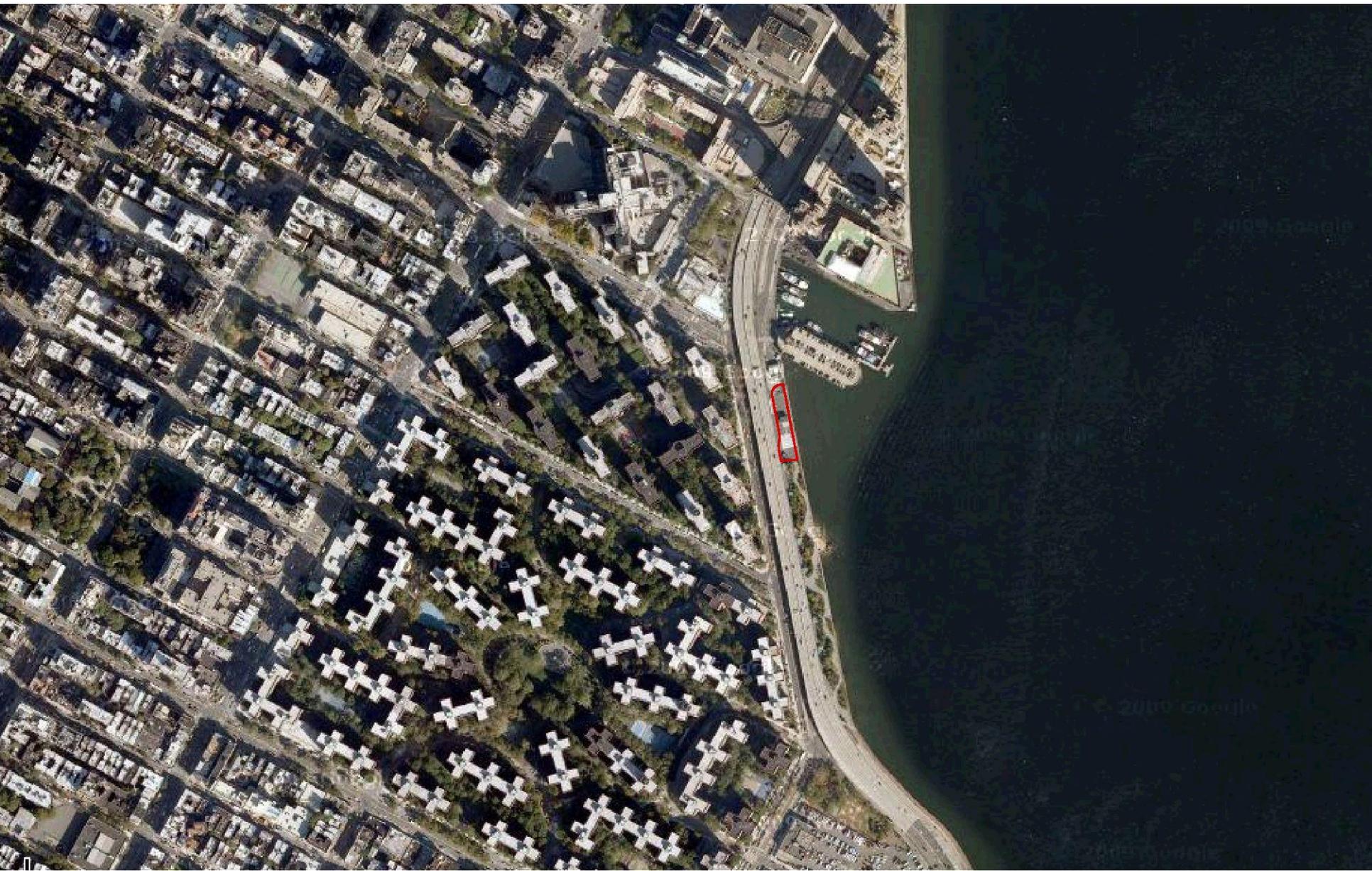


The Future Metropolis Solar 2 Presentation

October 6, 2010



DDC

Kiss and Cathcart, Architects

Solar 2 Building

03/02/2009

Aerial View

Site Location



DDC
Kiss and Cathcart, Architects

Solar 2 Building
03/02/2009

Site Photo

Looking North East from Roof of
Peter Cooper Village



DDC
Kiss and Cathcart, Architects

Solar 2 Building
03/02/2009

Site Photo

Approach from south in
Stuyvesant Cove Park

Solar One Programs

Education - 20000 students from 65 schools

- K-12 enrichment program: renewables, sustainable design, estuary, horticulture
- Green Design Lab Partnership with NYC DOE (replicable nationwide);
- Green Collar Workforce Training: Building performance, PV installation, horticulture, deconstruction and green youth entrepreneurship (2009 – 380 students participated; 2010 projected 1200+ and working in 4 other cities)

Solar One Programs Cont'd

Outreach

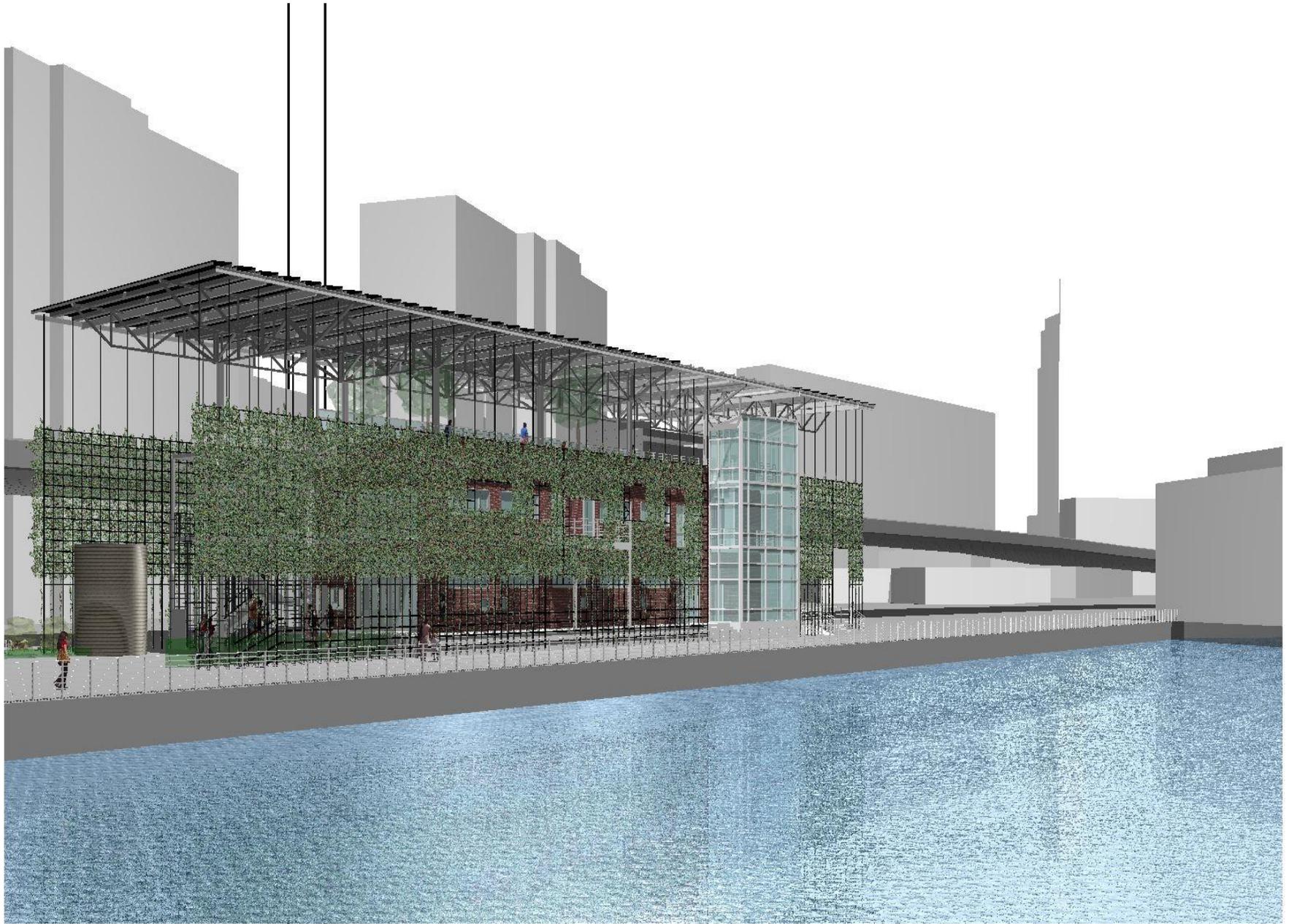
- Solar Advocacy and Education Program
- Energy efficiency public awareness programs – Green Renter, Green Congregations, Green From the Rooftop Down
- NYSERDA Energy \$mart Communities Coordinator

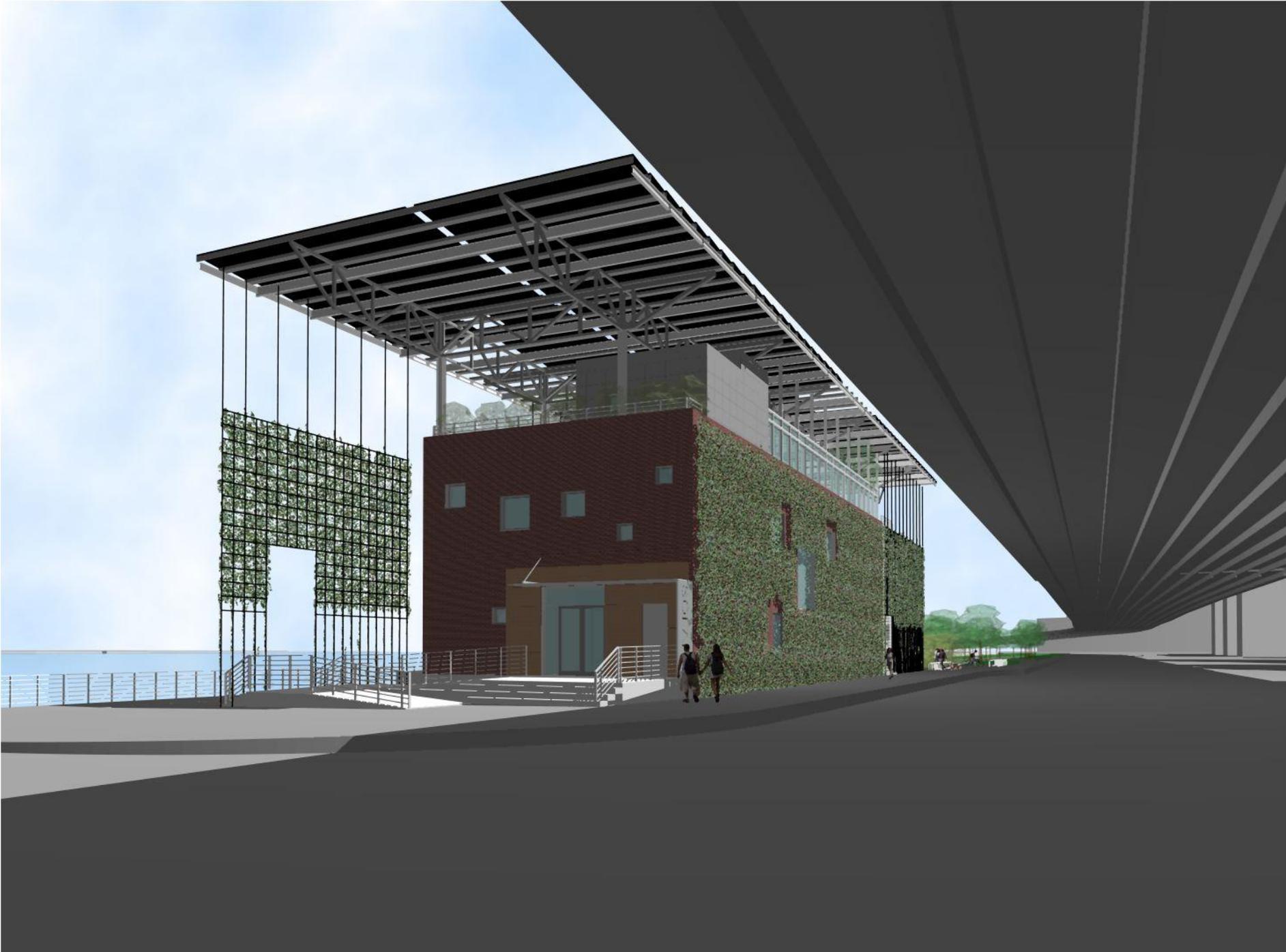
Arts

- Solar Powered Film, Dance and Music Festival
- Citysol and Citysol Kids Day
- SunToStars

Solar 2

- NYC's first carbon neutral, net zero energy building – building generates all of the energy it uses from the 92.6kW PV solar array on its roof
- Will meet the Living Building Challenge for net-zero water usage
- First building of its size and kind in the Northeast
- Addresses the issues of climate change, energy independence and CO₂ emissions
- A place to articulate the goals and aims of the City's PlaNYC
- Expanded programs
- Cutting edge exhibits









FDR Drive, Elevated

FDR Service Rd East

walkway / bicycle path

Green (Vine) Screen

Servery

Stage

Exhibit

Mechanical

Porch

Greenhouse

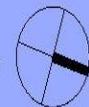
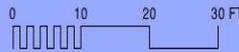
CSO
easement

Lease line

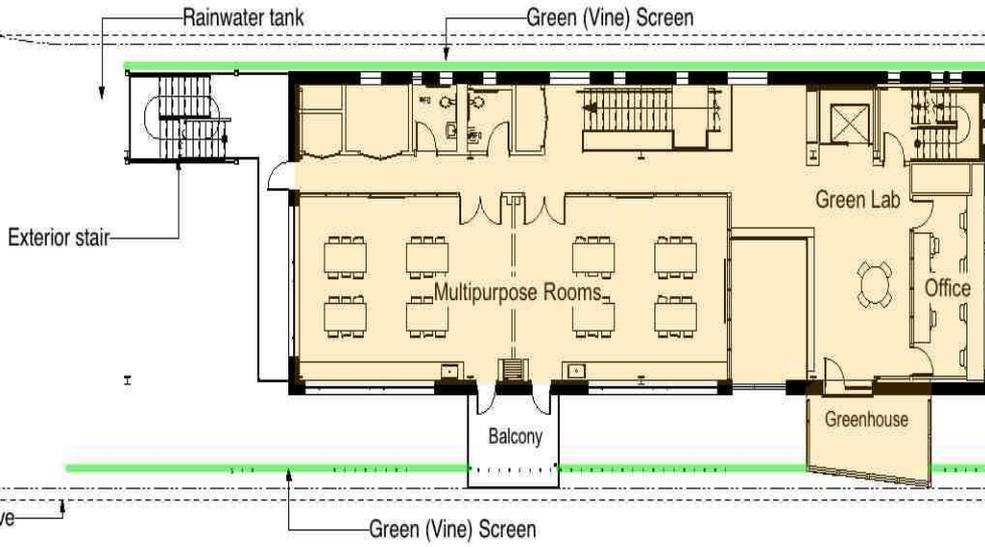
PV array above

Green (Vine) Screen

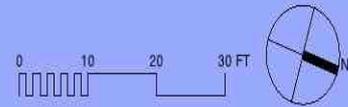
East River



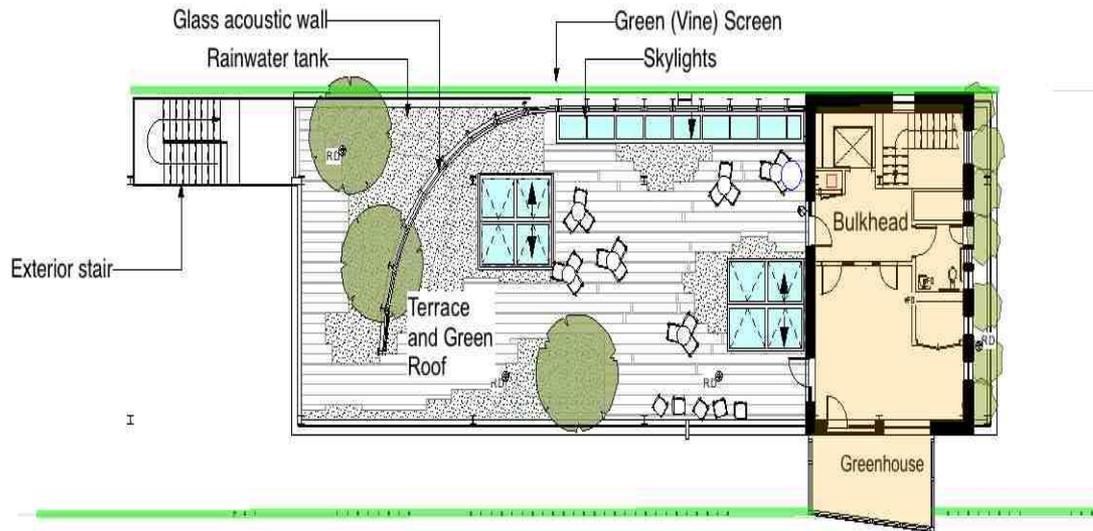
FDR Drive, Elevated



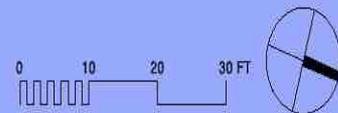
East River



FDR Drive, Elevated

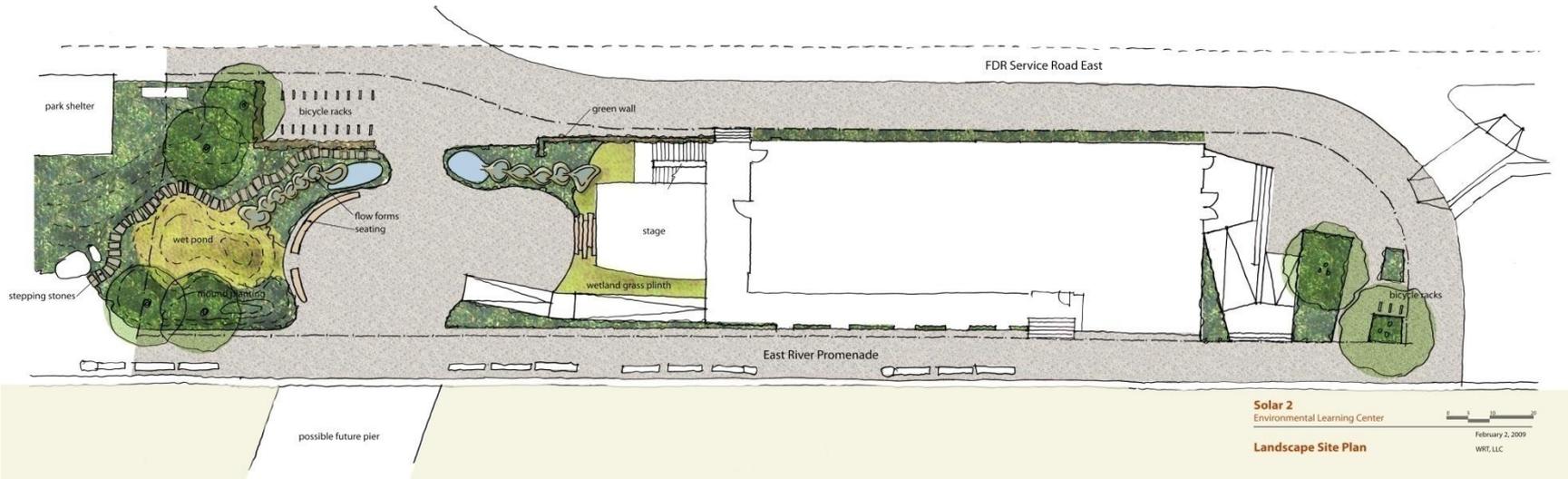


East River





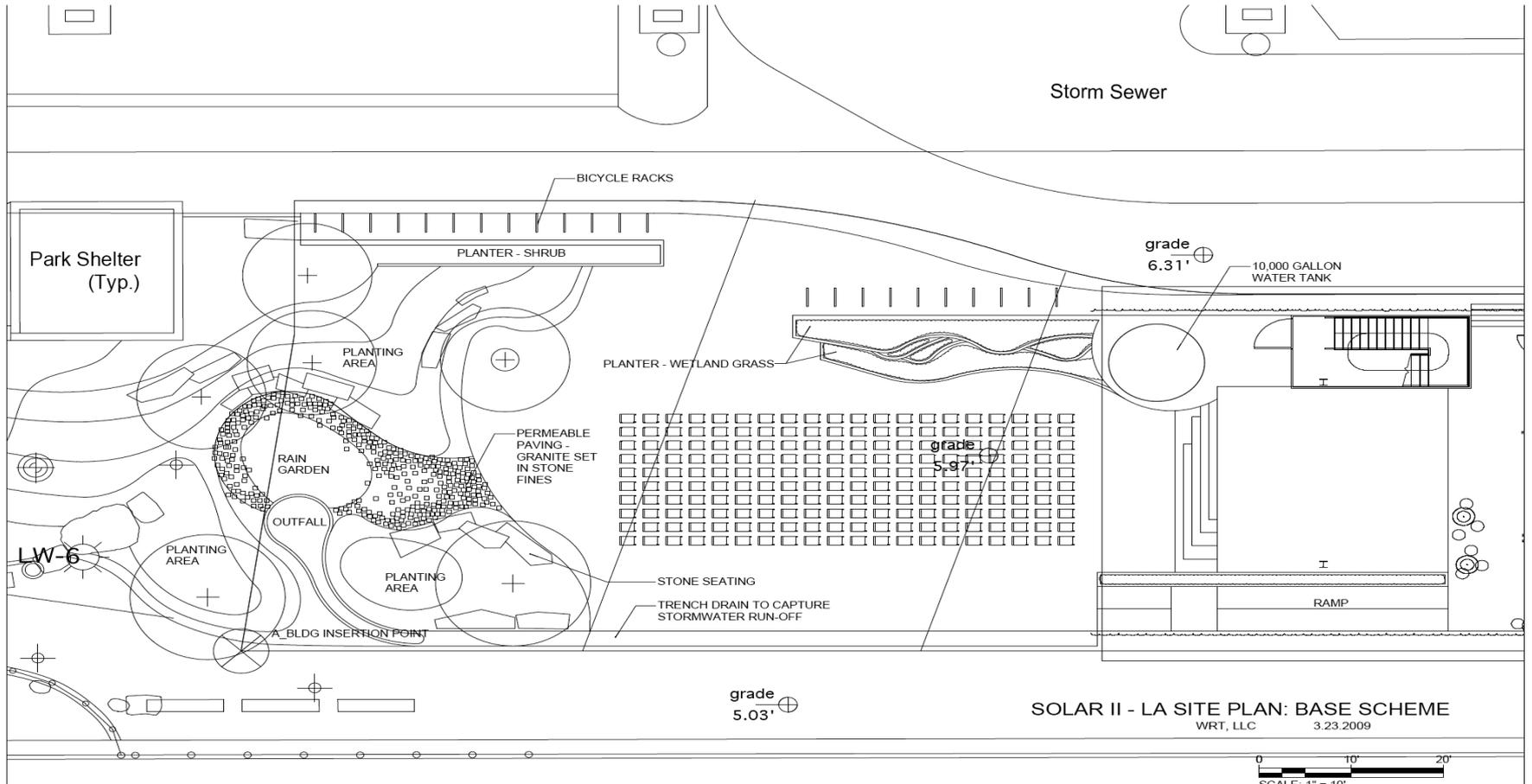
Wetlands Exhibit



Solar 2
Environmental Learning Center
February 2, 2009
WRT, LLC

Landscape Site Plan

Wetlands Schematic



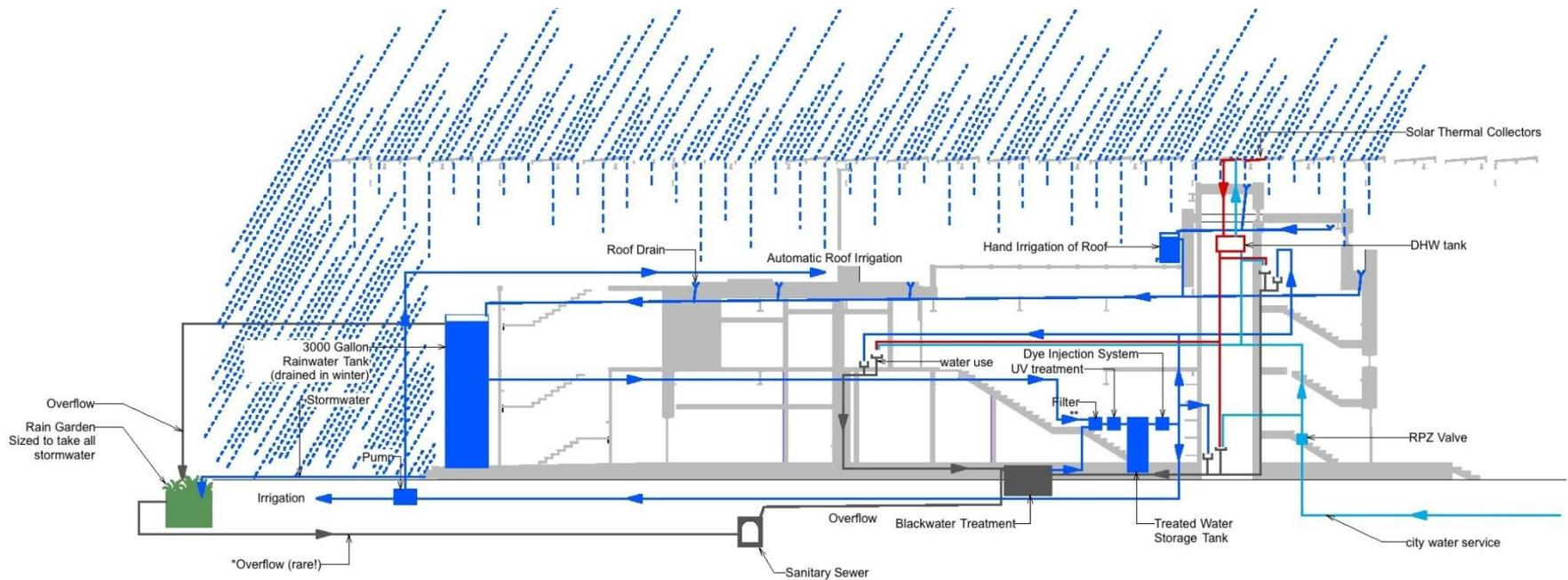
Water Reuse Strategy

- Rainwater Harvesting
- Wastewater Treatment
- Conservation Fixtures

Goal: Rainwater + treated wastewater meets needs for irrigation and toilets.

- Conserve
- Lower costs
- Reduce Sewer Discharge and Runoff
- Show feasibility
- Educate !!

Water Diagram



Goals

- Water treated and reused meets need for irrigation + toilets
- Living Buildings Challenge certification
 - Net zero energy, water, etc.
 - Water mandates net zero water to the level allowed by code
 - All Solar2 non-potable water use is provided by rain / waste water (since sinks and shower have to be potable water by code)

Team

- NYC EDC - landlord
- NYD Department of Design and Construction – construction management
- Kiss + Cathcart – architects
- Arup – engineering
- Turner Construction – preconstruction consulting
- Aecom – landscaping
- HDR – drilling Engineer
- Langdon – civil engineering
- Main Street Design - exhibits
- Community Environmental Center – green technical assistance

Current Status

- Raised \$1.2M and completed construction drawings
- \$5M remaining of the ~ \$11.5M needed for construction (Bloomberg \$3M, NYC Council \$1M, Borough President Stringer \$1M)
- Secured broad political support – Senators Schumer and Gillibrand, Mayor Bloomberg, Cong. Maloney, Cong. Israel, State Senator Tom Duane, Speaker Silver, and more
- All required permits obtained and site control