

CENTER FOR SUSTAINABLE LANDSCAPES



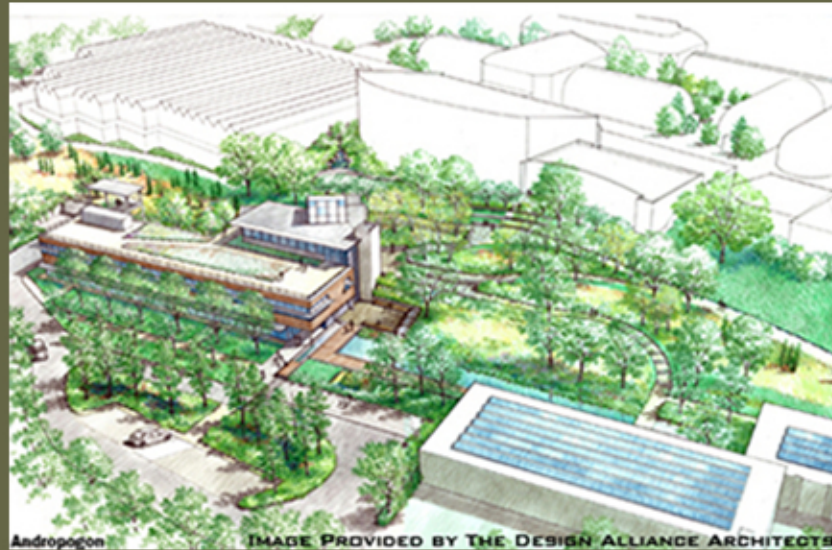
PITTSBURGH, PA



DANIEL ZARTMAN - PSU ARCHITECTURAL ENGINEERING CONSTRUCTION MANAGEMENT

GENERAL INFORMATION

OWNER - PHIPPS CONSERVATORY
GENERAL CONTRACTOR -
TURNER CONSTRUCTION
ARCHITECT -
THE DESIGN ALLIANCE ARCHITECTS
STRUCTURAL ENGINEER -
ATLANTIC ENGINEERING SERVICES
MEP - FP ENGINEER - CJL ENGINEERING
SIZE - 24, 350 GSF
HEIGHT - 44', 3 STORIES
CONTRACT VALUE - \$10 MILLION
PROJECT COMPLETION - APRIL 2012



STRUCTURAL SYSTEM

SUBSTRUCTURE - CAST-IN-PLACE CONCRETE
STRIP AND SPREAD FOOTINGS
SUPERSTRUCTURE - STRUCTURAL STEEL
FRAME CONSTRUCTION WITH COMPOSITE
SLAB ON DECK

MEP SYSTEMS

MECHANICAL SYSTEM

- 12400 CFM VARIABLE AIR VOLUME
ROOF UNIT
- RAISED FLOOR DISTRIBUTION SYSTEM
- AUXILIARY PASSIVE HEATING AND
COOLING

PLUMBING SYSTEM

- CONTEMPORARY DESIGN
- GRAY WATER RECYCLING
- RAIN WATER CISTERN

ELECTRICAL/LIGHTING SYSTEM

- 600 A, 3P
- 120/208V & 277/480V SERVICES
- 36 KW PV ARRAY
- LED AND COMPACT FLUORESCENT LIGHTING

SUSTAINABILITY

GOALS:

- LEED PLATINUM
- LIVING BUILDING CHALLENGE
- SUSTAINABLE SITES CERTIFICATION
- NET ZERO ENERGY CONSUMPTION
- NET ZERO WATER CONSUMPTION

ADDITIONAL SUSTAINABLE FEATURES:

- DEMAND CONTROLLED VENTILATION
- DIRECT CONTROL BUILDING
MANAGEMENT SYSTEM
- LOW EMISSIVITY WINDOWS
- REGIONAL, RECYCLED, AND
SALVAGED MATERIAL USE
- GREEN ROOF
- HIGH THERMAL MASS FACADE
- ON SITE TREATMENT OF BLACK
WATER
- GEOTHERMAL GROUND SOURCE
HEAT PUMP
- ENTHALPY WHEEL
- VERTICAL ACCESS WIND TURBINE