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TEACHING EXPERIENCE

Assistant Professor and Cooperative Extension Specialist, Department of Landscape Architecture, Rutgers, The State University of New Jersey, 2012 – present

Courses:

Sustainable Landscape Technologies and Systems Design:

An advanced lecture/lab course that focuses on the landscape as a dynamic system. Landscapes and technologies are considered as differently scaled systems that are characterized by sources/inputs, stocks/reserves, interconnections, processes, feedback loops, and outputs/products/externalities.

Construction 2: Materials and Structures:

An introduction to basic Landscape Architectural materials, structures and construction. The lecture/lab structure encourages students to apply and generate knowledge in hands-on experiments, models and small building projects that explore topics such as soils, water, hardscape, walls, park/garden structures, furnishings, lighting and advanced technologies.

Praxis Studio: Design/Build Newark: Map to Material: Implementing Salvage and Reconstruction. Studio course leading students through a process of analysis, community listening, ground truthing, community engaged design, and salvage-reuse focused detail design and construction. Design and installation of: rain gardens, bioswales, stormwater tree trenches, self-wicking reused-pallet raised beds, reused pallet deck and compost bins, reused concrete seat wall and terrace steps. Installed 7 trees and 200 rain garden plants. Worked alongside community members, the ITV Board, Newark Community Solutions Alternative Incarceration Program participants.

Praxis Studio: Transforming Blighted Housing into Valued Community Environmental Amenities

This studio addresses the pressing social and environmental problems associated with neighborhood change due to disaster, climate change and demographic shifts. Students will guide the transformation of a flood damaged property from its current abandoned condition to a site hosting green infrastructure for habitat restoration and stormwater management. The students will be led by a professional deconstruction contractor to take apart the house and reuse/recycle up to 80% of the materials. Student designs for rain gardens, bioswales and useful park features will increase infiltration on the site while also welcoming neighbors to learn about the practices.

Other Academic Experience:

Assistant Instructor, University of Pennsylvania, 2009, Urban Horticulture and Planting Design, with Instructor David Ostrich, RLA, WRT Design
Jury Critic, University of Pennsylvania and Drexel University, 2006-2010
Graduate Assistant, SUNY Environmental Science and Forestry, 2003-2005
Graduate Assistant, Site Design with Donald Ferlow, FASLA
Graduate Assistant, Introductory Drawing with Joanne Gilbert
Graduate Assistant, Place, Culture, Design with Matthew Potteiger

PROFESSIONAL EXPERIENCE

Associate, Richardson & Associates Landscape Architects, 2011 - 2012
Landscape Designer, LEED AP, Wallace Roberts & Todd, LLC, 2005 – 2011
Founder, Rubble Research and Design (RR&D), 2004 - present
Independent Research and Design: Willow Patch Stormwater Gardens, Cazenovia Preservation Foundation Grant, Central New York Community Foundation, 2004-5
Apprentice Stonemason, Pete Wilson Stoneworks, Portland, Oregon, 1998-2001

EDUCATION

Masters of Landscape Architecture, State University of New York, College of Environmental Science and Forestry, 2005
Bachelor of Arts, Oberlin College, Oberlin Ohio, 1993
Majors: Studio Art, Spanish (High Honors in Spanish), History Minor

PROFESSIONAL QUALIFICATIONS

LEED Accredited Professional, Member US Green Building Council, Member Building Materials Reuse Association; Computer Skills: AutoCAD, Photoshop, Illustrator, InDesign, SketchUp; Spanish Fluency

BUILT DEMONSTRATION PROJECTS

SUMMIT CITY HALL AND SUMMIT FREE LIBRARY RAIN GARDENS

Designed and installed Rain Garden projects as demonstrations of "Building Streams" program – a design vision for creating sustainable drainage systems that visualize buildings and impervious surfaces as sources of new urban streams. The designs tie into existing features while also emerging as new aesthetic directions for municipal buildings, demonstrating that green design contributes to quality of life and a municipality's "sustainable image", important in attracting new investment, residents and commerce. Summer 2016.

HILLSBOROUGH MUNICIPAL RAIN GARDEN AND SUSTAINABLE CAMPUS MASTERPLAN

Provided full site masterplan focused on outdoor activity, environmental improvements and historical and educational opportunities for Municipal complex, home of Hillsborough Townships Administration Offices, Public Library and Police. Presented Plan and Rain Garden

design to Council and Mayor. Designed and supervised construction of first project of masterplan, a 2,000sf Rain Garden with access pathway and Tree Allee at main entrance. Worked with NJ Tree Foundation, Master Gardeners and Boy Scout Troop 156 on installation. Spring 2016.

HIGHLAND PARK HIGH SCHOOL SUSTAINABLE CAMPUS MASTERPLAN AND DEMONSTRATION RAIN AND POLLINATOR GARDENS

Created a plan for the school for phasing and contextualizing green infrastructure projects. The plan gathers ongoing and potential projects together in one vision that can be used for generating support, encouraging engagement and project planning. Designed and supervised installation of first projects, rain garden and pollinator garden. Met with students to share concepts and hear their research into plant species recommendations, hosted garden planting event with High and Middle School students and Rutgers Water Resources. Spring 2016.

RUTGERS LANDSCAPE NURSERY COMMERCIAL DEMONSTRATION RAIN GARDEN

Design and construction supervision of a rain garden at the commercial nursery operations of Rutgers Landscape Nursery (no affiliation) in Ringoes, NJ. The path of water from the shop's rooftop was highlighted in decorative downspouts, rain barrel, trench drain, specimen boulders and boulder seats to the rain garden. All elements were conceived as commercial displays to communicate the range of products and services offered by the nursery/design/build operation. Spring 2015.

SPRINGFIELD RAIN GARDEN PROJECTS

Grant writing, design, construction, construction supervision, educational programming and maintenance training for 5 rain garden projects. Funded by Sustainable Jersey and the Springfield Board of Education. Includes gardens at the Caldwell Elementary School, Chisolm Community Center, Jonathan Dayton High School Courtyard, JDHS Front Entry "Jersey Rain Gardens" and Municipal Lot Rain Garden. Projects included educational presentations, design meetings with students, volunteer trainings, and ongoing facilities maintenance advising. Fall 2014 – Fall 2015.

THE LARGEST RAIN GARDEN IN NEW JERSEY, RAHWAY, NJ

Designed and directed construction of a 3,000sf rain garden in the Kiwanis Park, Rahway, NJ. Design features include reused concrete and stone erosion control devices, municipal scale and style plantings, fill-in seeding strategies and continuing training/educational workshops for Rahway Volunteers group. Fall 2014.

RAHWAY RESIDENTIAL RAIN GARDENS PHASE I, RAHWAY, NJ

Working closely with Rutgers Cooperative Extension Water Resources Program engineers, Tobiah Horton and Richard Alomar, Extension Specialists in Landscape Architecture designed 10 pilot rain garden projects for residential sites in Rahway. As an example of dispersed capture, filtration and slow release the gardens demonstrate the potential for the practice to be integrated with neighborhood, homeowner and community aesthetic values. The site assessment, design process, homeowner involvement and construction observation produced a

replicable process that is supported by a user friendly design guide, homeowner feedback tools, construction supervision guidelines, maintenance guidelines, and "As-Planted" plans to aid homeowners in maintenance. The process design was considered as significant as the final gardens – Rutgers' process design and support will help to achieve the Rahway Watershed's target of 1000 rain gardens by providing knowledge and capacity to other design and construction teams. Construction completed: October 2013.
Press: http://www.nj.com/suburbannews/index.ssf/2013/10/rahway_rain_garden_project_nea.html

RAHWAY RESIDENTIAL RAIN GARDENS PHASE II, RAHWAY, NJ

Rahway Rain Gardens Project, Phase II. Designed 8 residential rain gardens, installation, Garden features include rain gardens for steep sloped sites, Japanese garden inspired design, Shrub and red flowering plant-only design, and 2 projects featuring reused concrete structures. Phase II realized the word of mouth benefits from Phase I, as project marketing was unneeded, demonstrating the effects of demonstrations for adoption of new green infrastructure practices. Educational signage for both phases installed. Spring 2014.

FLORICULTURE GREENHOUSE RAIN GARDENS

Summer 2013. Advised, with Asst. Prof. Alomar, the undergraduate student Ryan Goodstein in the design and installation of a rain garden in the Floriculture courtyard area. The design regraded the area to divide the courtyard's drainage areas, directing half of the space into a rain garden and overflow. Hosted and presented to Rotary Club for volunteer/funding event to install garden.

PROFESSIONAL PROJECTS

NORTH CHARLES STREET IMPROVEMENT PROJECT AND OPTICAL GARDENS

Project installed Fall 2015. Design: 2010 WRT Design, project management (through documentation), public art management and lead landscape design by Horton. $28M Project, including $250k percent for art "Optical Gardens" the integrated landscape and art installation at the corner of 34th and N. Charles, collaboratively designed by Horton and Haddad/Drugan public artists.

WOMRATH PARK CONSTRUCTION OBSERVATION

Fall 2012. Contracted by WRT Design to observe construction of the bioretention area addition to the north Philadelphia park, reuse design by Horton with WRT (2010). Supervised installation of custom sculptural erosion control features from demolition materials removed during site clearing.

QUEENS PLAZA BICYCLE AND PEDESTRIAN IMPROVEMENT PROJECT, LONG ISLAND CITY, NY

This AIA Merit Award- winning project reinvisions urban infrastructure in the new sustainability context. Mr. Horton joined the project to design an innovative treatment for landscaped median areas. This design is at the forefront of sustainability, as it utilizes reused sidewalks to create impassable areas that dissuade pedestrians from crossing traffic. Mr. Horton designed custom details to translate this potential waste material into a flowing stream of rubble; a

captivating interpretation of urban anthropogenic geology artfully designed as urban infrastructure. His design conserved 1.7 Billion BTUs of embodied energy in the reuse of concrete and replaced an alternative design that would have produced approximately 60 tons of CO_2 in new concrete placement. Photos:
http://www.flickr.com/photos/tobiahhorton/sets/72157625528666819/
Press: www.treehugger.com/files/2011/01/recycled-sidewalks-make-cool-but-scary-traffic-medians-photos.php
http://dirt.asla.org/2011/03/09/new-queens-plaza-uses-broken-concrete-to-keep-pedestrians-safe/
http://inhabitat.com/nyc/jagged-chunks-of-sidewalk-reused-to-create-unique-median-for-queens-plaza/

WILLOW PATCH STORMWATER GARDENS, CAZENOVIA, NY

Mr. Horton was hired by the Cazenovia Preservation Foundation as lead designer and construction manager for the Willow Patch Stormwater Gardens, in Cazenovia, NY, (construction completed, June, 2005). The Willow Patch is an historic created wetland from the late 19th era of willow production for the Liverpool, NY basket making industry. The project mitigates the impact of stormwater from Main Street on the Willow Patch and the receiving waters of the Chittenango Creek (class A trout stream). Mr. Horton designed weirs and energy dissipation aprons reusing concrete from Main Street's deconstructed sidewalks to detain water in graded basins planted with purple willow. Each weir was designed to be a unique "folly" to be surprised and delighted by in a weaver's harvesting walk through the dense thickets of willow.
Photos: www.flickr.com/photos/tobiahhorton/sets/72157603194009082/
Press: www.designundersky.com/dus/2008/9/19/material-transcended-concrete.html
http://superuse.org/story.php?title=Reuse-Sidewalk-Concrete-1

GRANTS

Co-Principal Investigator. Royce Brook Watershed Green Infrastructure Implementation Projects, USEPA 319(h): $175,539. 2015-2017.
Principal Investigator. Springfield Rain Gardens. Sustainable Jersey: $10,000. ($30,000 in kind). 2014-2015.
Partner. Green Infrastructure for the City of Newark. USEPA 319(h): $312,517. 2013-2016.
Lead Designer. Robinson's Branch Green Infrastructure Projects. USEPA 319(h). 2012-2015.

CONTRACTS/FEES FOR SERVICE

$8,000 in contracts and fees for services for design/build of landscape, masonry and green infrastructure projects on residential properties. 2014-2016.

SPEAKING

Give and Take: A Social and Material Systems Approach to the Open Community Garden, Camden SMART Forum, June 2016
Reuse as Disruption, Canadian Association of Geographers Conference, June 2016.
Give and Take: A Social and Material Systems Approach to the Open Community Garden, Building Materials Reuse Association Conference, Raleigh, NC, March 2016.
Rain Gardens, NJ Plant Show and Exposition, Edison, NJ, February 2016.
Hardscape and the Home Landscape, Rutgers Gardens, February 2016

Achieving the Potential of Green Infrastructure through Systems Thinking, Environmental Design Research Association Conference, Los Angeles, CA, May 2015.

Urban Value Quarry, European Association of Urban History Conference, Lisbon, Portugal, September 2014

Quarry and Seep: Material Reuse in a Park's Green Infrastructure Retrofit, Environmental Design Research Association Conference, New Orleans, LA, May 2014.

Salvaging the Three Legged Stool: Reuse Value(s) in Sustainability Contexts, Council of Educators in Landscape Architecture (CELA) Annual Meeting, Baltimore, MD, March 2014.

Quarrying Urbanite (Concrete): Treating the City as a Geological Resource, Rutgers Geology Museum, New Brunswick, NJ, January 2014.

Sustainable Design for the Home Landscape, Rutgers Organic Land Care Certificate Course, EcoComplex, Bordentown, NJ, January 2014.

Reclaimed Materials in Landscape Design & Construction, NJ Plants Show, Edison, NJ, January 2014.

Solid to Fluid: Wastestream Constructions, Reclaim + Remake Symposium, Catholic University, Washington, D.C., April 2013.

Reuse in Green Infrastructure; Reinventing Urban Places with Redirected Waste, Conference of the Building Materials Reuse Association, Seattle, WA, April 2013.

Site Design and Detailing with Reclaimed Materials, ASLA Annual Meeting, Sept. 2012

Designing with Culturally Embodied Energy, Queens Plaza, Conference of the Building Materials Reuse Association, Yale University, May 2011

The Work of Professor Emeritus Christopher N. Horton, Gallery Talk, Amherst College Gallery, 2008

Conservation of Embodied Cultural Energy: An Aesthetics of Reuse, The Willow Patch Rain Gardens, Conference of the BMRA, University of Wisconsin, Madison, May 2007

SERVICE

Advising Service Project: Muzi Li, NJ Sharing Network Memorial Garden, Spring, 2015

Advising Service Project: Ramapough Lenape Nation, Community Center and Long House Conceptual Masterplan, Fall 2015 – Present

Explorations: Teaching Science Concepts with Drawing, Modeling and Writing, NJ Schools, Summer 2013 – ongoing.

Franklin Theater Works, Site Design Concept Plans, Spring 2015. Development conceptual plans for site review process for an 11 acre site including building siting, parking layout, created wetlands and features for concepts for landscape as theater and art/environment educational experience.

Rain Garden maintenance training program, Kiwanis Park, Rahway, NJ. Summer 2015 – present. Provides training and information to Rahway Volunteers group for maintenance and improvement of the "Largest Rain Garden in New Jersey" at the Kiwanis Park.

Shiloh Garden Entry Trellis, Construction II Service Project, Spring 2014

Harborview LBI Stormwater Concept Design, Spring 2013. Provided conceptual design

services to condominium community seeking to manage stormwater in a refurbished plaza area.

Public Sculpture Board, 2013 – Present.

NJASLA – Keansburg Volunteer Project, June 2013

Flooring Deconstruction Project, Civilian Conservation Corps Building, Rutgers University, 2013

Rutgers Gardens Bridge, with Construction II, Fall 2012. Organized student involvement to assist in the completion of a masonry structure at Rutgers Gardens.

Chestnut Hill Land Use Planning and Zoning Committee Member, 2009 – 2011

Community Design Collaborative, Pennhurst Historic Hospital Reuse Study, 2010

Community Design Collaborative, Arts Garden for At-Risk Teens, 2007

EDUCATIONAL PROGRAMS/LECTURES

Rail Arts River Projects, Project Co-initiator: participated with project team in a competitive entry workshop at the Sustainable Cities Design Academy, Washington, D.C. sponsored by the American Architectural Foundation. Rail-Arts-River proposes multi-faceted, collaborative projects to link New Brunswick neighborhoods, the downtown arts district and the Raritan River through art and green infrastructure installations, performances and community projects. Project includes research, workshops, educational community listening/design sessions and art/green infrastructure installations to be developed through 2015-2017.

From Art School to a Landscape Architecture Career, Pace University, April 2016

Voorhees Gabions Project, Spring 2015 – Present. A part of the Voorhees Environmental Park Project (CUES). Leads a team of studenst in the research and design of reused materials gabions for entry installation to interpret site history. Project includes a pilot gabion installation for Earth Day, Spring 2015.

Rain Garden Design, Rutgers Vets, September 2015

Rain Garden Presentation – Rutgers Landscape Nursery, Spring 2014

Reused Material Rain Barrel Workshop – Greater Newark Conservancy, Fall 2014

Rain Gardens and Reused Materials, Summer 2014, Lecture to Members of the Rotary Club, as part of the Rotary funded Project and Rotary Service Day work on the installation of a rain garden at the Rutgers Cook Campus Floriculture Greenhouses Courtyard.

Reuse Design Process, Garden Show Lecture 2/14/2013

Material Reclamation and Reuse in the Design Process: NJ Plants Lecture.

Research Program: Introduction to RCE Agents and Specialists: Snyder Farm & EcoComplex Talk

ARTICLES/BOOK CHAPTERS

In Press Book Chapter, "Reuse Voices in Design", in **Subverting Consumerism: Reuse in an Accelerated World**, ed. R. Crocker. Routledge, expected Spring 2017.

A Layered Place: Reuse of Material in Recoding Public Space, in Material Culture Review, Special Issue: Objects in Motion, 74-75, Spring 2012, (pub. Spring 2013)

ART EXHIBITIONS

Stream Bed Traces, Long Term Installation, Fall 2015 – Present, Robert Wood Johnson Wellness Center Atrium, Watershed Sculpture Project Group Show.

Multi-Discipline Drawing Show (Landscape Architecture, Architecture, Art, Industrial Design), 2005,Lowe Gallery, Syracuse, New York.

Dams, Solo Painting and Sculpture show, 1995, Medicine Hat Gallery, Portland, Oregon,

Factory Flower, Solo Painting show, 1992, Maison Visinand, Montreux, Switzerland.