## **ROWAN UNIVERSITY**

## Rowan University Stormwater Management & Landscape Master Plan

Glassboro, New Jersey



Detail of Master Plan Concept

rom its modest beginnings in 1923 as teacher training school, Rowan University has grown to become a comprehensive public research university with a strong regional presence and reputation. Along with this growth has come substantial reduction of pervious surfaces and inadequate stormwater management, which has adversely impacted the quality and biodiversity of Chestnut Branch, the stream system that runs through the center of campus. Having developed in spurts, Rowan's 225-acre campus includes buildings of various styles and open spaces of several scales and types. A major roadway bisects the campus, impacting mobility

and safety, as well as ecological and campus connectivity.

With significant growth predicted for the future, and several capital improvement projects in the planning phases, the University called upon Biohabitats to develop a master plan to guide the creation of sustainable, functional campus landscapes that integrate stormwater management, open spaces, and connectivity.

Biohabitats began by dividing the campus into zones, based on watershed catchment areas. Within each zone, we evaluated the interrelationships and environments of open spaces, performed hydrologic analyses to determine potential impacts on current, ongoing and future By integrating stormwater management and landscape master planning, a university now has a holistic strategy for campus expansion within a network of thriving campus landscapes and high-performing ecological infrastructure.

development by 5, 10, and 100 year storms, and examined overall campus connectivity. The Biohabitats team then identified opportunities for restoration, retrofitting, conservation, and new development within each zone, as well as opportunities to connect the zones to create integrated, functional, and aesthetic open space environments. The team also developed a strategy to guide the implementation of these campus improvements.

Inherent in the master plan is the goal to protect, enhance, and create functional or "working" landscapes that demonstrate and embrace water as a natural resource, while also providing benefits such as habitat, microclimates, aesthetics, recreation and respite, social spaces, and learning landscapes. The plan provides a framework for future campus management and planning, while also defining a renewed sense of natural

function, social interaction, and spatial definition.

A unique aspect of this plan was that it was accompanied by a parallel design and implementation effort to showcase the principles and vision of the master plan. The featured early action project was targeted to improve drainage around Memorial Hall where chronic localized flooding was occurring by transforming the landscape into a water filtration zone that slowed, treated and directed flows away from the building. Native plantings were installed to frame the area in what is now a focal point of the building entrances.

## **SERVICES**

Inventory & Assessments Planning Design Management Public Outreach Design Guidelines

conservation planning ecological restoration

ecological restoration regenerative design



800.220.0919 www.biohabitats.com Physiographic Province Atlantic Coastal Plain

Bioregion Chesapeake/Delaware Bays

> **Watershed** Mantua Creek