Bioengineered Waterway & Slope Stabilization Applied

RLA, LEED-AP BD+C
+ 1 413 687-1135
tom@wellnesscapes.com
www.wellnesscapes.com

DESIGN
PLANNING
CONSTRUCTION ADMINISTRATION
MAINTENANCE GUIDANCE
PERMITTING

*Approved Federal Contractor*
Wellnesscapes, LLC

Award Winning Landscape Architecture firm located in Northampton, MA

Over 30 years of Success

Designing Resilient Ecologically Based Bioengineering Solutions for Site Stabilization and Restoration Projects

We work as effective Partners with the Engineering Community
Highlighted Waterway & Slope Projects:

• Neponset River Daylighting, Gillette Stadium, Foxboro, MA
• Hammond Pond Beach Stabilization, Goshen, MA
• JCHE Golda Meir House Wall & Slope Reconstruction, Newton, MA
• Fresh Pond Reservation – Northeast Sector, Cambridge, MA
• Blue Hills Reservoir Restoration, Milton & Quincy, MA
• Coastal Beach Dune Restoration, S. Kingstown, RI
• Residential Bank Reconstructions, S. Hadley & Amherst, MA
• Sheehy Road Landfill Capping – Bioswale & Roadway Embankment, Ware, MA
Understand What’s Working Well and Do A Lot of It!!
Understand What’s *Not* Working Well and Stop It!!
Project: Hammond Pond Beach Stabilization, Goshen, MA
Be Redundant! It's not Boring!
Be Redundant! It’s is *not* Boring!
Log Bars & Cut Brush Barriers
Reuse On Site Resources!
Neponset River Restoration (Daylighting) Project
for New England Patriots
Foxborough, Massachusetts
Neponset River Daylighting Project – Site Context

Downstream End

Upstream End
Neponset River Daylighting Project – Before
Neponset Then and Now

Downstream End

Upstream End
Neponset River Daylighting – Upper Narrow Section (Upstream: South End)
Neponset River Daylighting – Lower Wide Section (Downstream: North End)
Neponset River – Soils & Hydrology

Floodplains

1945 Topographic Map

Soils
Neponset River – Wetlands & Riverfront

North Area Wetlands

Riverfront Area

South Area Wetlands
Neponset River – Reference Reaches
Neponset River – Design Goals & Objectives

1. Recreate Sinuous, Irregular Channel
2. Pool-Riffle System
3. Stabilization
4. Wetland Creation
5. Upland Restoration
6. Native Biodiversity/Habitat Value
7. Flood Control-Access Berm
Neponset River – Design: Pools & Riffles
Neponset River Design: Earthmoving & Stability
Neponset River Design: Stability & Habitat Benefits
Neponset River Design: Planting Strategies
Neponset River Design: Planting Strategies
Neponset River Establishment: Ecosystem Matrix

2001

2003

2005
Neponset River Establishment: Ecosystem Matrix

2006
Neponset River Establishment: Ecosystem Matrix

2015
Residential Bank Reconstruction, Amherst, MA
Residential Bank Reconstruction, Amherst, MA
Project: Coastal Beach Stabilization, S. Kingstown, RI