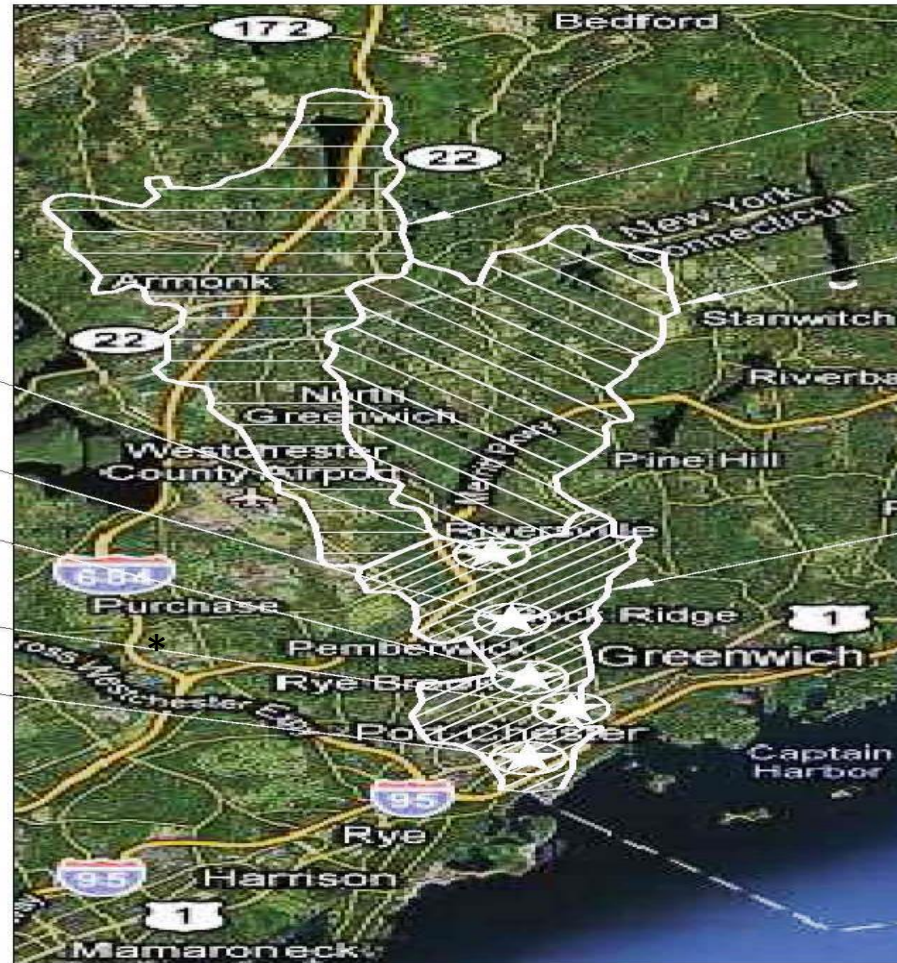


LAST 10 YEARS OF RESEARCH & DESIGN HAS LED US TO UNDERSTAND THE PROPOSED PARK FLOOD AMELIORATION SITES BETTER

- TOLL GATE PONDS PARK
- GLENNVILLE RIVERSIDE PARK
- CAROLINE / MUNSEE PARK **PEMBERWICK BAY**
- LYON HOUSE PARK
- RIVERWALK PARK

LONG ISLAND SOUND INSTITUTE PROJECT

CLEANSING RUNOFF & RESTORING SALT MARSHES & BOGS USE OF STRATEGIC DREDGE YIELD PLACEMENT & RCRA APPROVED YIELD **BASE PREMIS EXPLANATION TO EMERGENCY FLOOD EVENT IDA**



Byram River West Branch

Byram River East Branch

Byram River Valley

PARK DESIGN SITES

Basic Criteria

- 1 All Public Land
- 2 Choke Point of Shed
- 3 Detain Site Capacity
- 4 Retain Site Capacity
- 5 Infiltrate Site Capacity
- 6 Recreational Suitable



PETER F. ALEXANDER
 LANDSCAPE ARCHITECTURE
 ENVIRONMENTAL SITE PLANNING
 PETERFALEXANDER.COM
 203-869-8632

**BYRAM RIVER
 PARK SYSTEM**



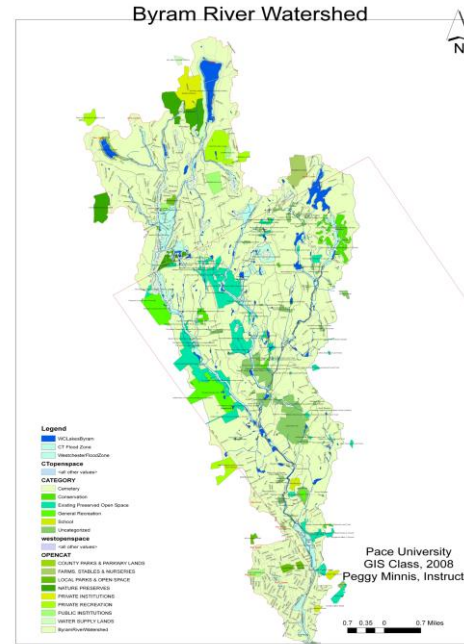
NOT TO SCALE



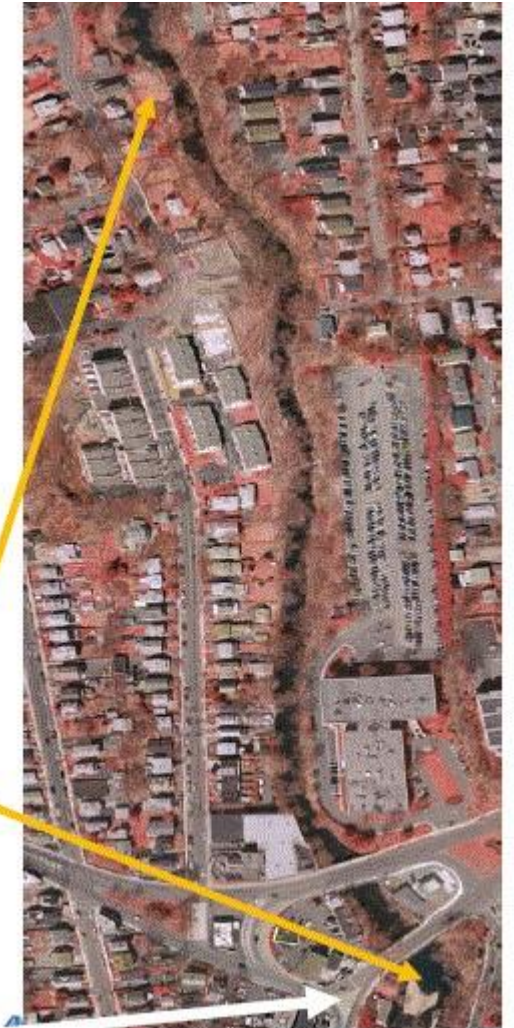
Byram River
West Branch

Byram River
East Branch

Byram River
Valley



MOTIVATION MAP 2008 by
Peggy Minnis & Her Students at Pace thanks
To them it is hard to keep pace with the new
Technology over the last 14 years



Scenario #1:
Bottom width = 45'
Slope of Channel Bottom = 0.1%
Depth of Channel & Depth of Flow = 0.5'
Channel Side Slopes = 3:1 (horizontal to vertical)
'n' Value = 0.02 (earth)

Calculated Values:
Channel Cross Sectional Area = 23.2576 square feet
Full Flow Rate = 33.6216 cubic feet per second
Full Flow Velocity = 1.4456 feet per second

Scenario #7:
Bottom width = 45'
Slope of Channel Bottom = 0.1%
Depth of Channel & Depth of Flow = 7.0'
Channel Side Slopes = 3:1 (horizontal to vertical)
'n' Value = 0.02 (earth)

Calculated Values:
Channel Cross Sectional Area = 463.4848 square feet
Full Flow Rate = 3255.3814 cubic feet per second
Full Flow Velocity = 7.0237 feet per second

NY/ACE BRIDGE SITE & end of EMERGENCY RESPONSE

LSI Long Island Institute

BASE PREMIS 7' tidal Influence Restricted 23 hours a day restoration will increase flow capacity up to 700% at FLOOD EVENT



Trinkaus Engineering, LLC
114 Hazzard Ridge Road
Southbury, Connecticut 06488
203-264-4556 (office)
+1-203-520-5103 (mobile)
E-mail: stinkhaus@trinkaus.com
<http://www.trinkaus.com>

April 2, 2022

Long Island Sound Institute
c/o Mr. Peter Alexander, L.A.
500 West Putnam Avenue
Suite 400
Greenwich, Connecticut 06830

Re: Hydraulic Channel Computations

Dear Peter,

At your request, I have calculated the flow rate for two different channel sections for the Pemberwick Bay.

Scenario #1:
Bottom width = 45'
Slope of Channel Bottom = 0.1%
Depth of Channel & Depth of Flow = 0.5'
Channel Side Slopes = 3:1 (horizontal to vertical)
'n' Value = 0.02 (earth)

Calculated Values:

Channel Cross Sectional Area = 23.2576 square feet
Full Flow Rate = 33.6216 cubic feet per second
Full Flow Velocity = 1.4456 feet per second

Scenario #7:

Bottom width = 45'
Slope of Channel Bottom = 0.1%
Depth of Channel & Depth of Flow = 7.0'
Channel Side Slopes = 3:1 (horizontal to vertical)
'n' Value = 0.02 (earth)

Calculated Values:

Channel Cross Sectional Area = 463.4848 square feet
Full Flow Rate = 3255.3814 cubic feet per second
Full Flow Velocity = 7.0237 feet per second

Please contact my office with any questions.

Respectfully Submitted,
Trinkaus Engineering, LLC


Steven Trinkaus, PE

Major flood risk management project kicks off on Long Island



New York state officials, along with the Army Corps and project partners, [...]

[Read more →](#)

Dredging and Climate Change



The International Association of Dredging Companies (IADC) recently [...]

[Read more →](#)

EPA to accelerate cleanup for dozens of Superfund projects



The U.S. Environmental Protection Agency (EPA) recently announced [...]

[Read more →](#)

Engineer Trinkhaus is a very Valuable Long Island Sound Watershed Asset

The Terrific Remarkable Modern Technology & Techniques of Implementation still require an understanding of harnessing the unique quality of each Watershed & SubWatershed

My Experience working intermittently with the Corps & my special appreciation for our DEEP here in Connecticut will be honored by having selected him as our Lead Engineer as Specialty PEs will play roles critical to our Project

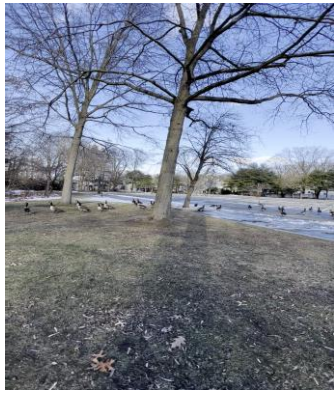
Engineer Trinkhaus's recent success of effectuating the Thousand Year plus Techniques & incorporating modern physical & regulatory paths will be used in

BIDDING PROCESS @ COMMENCEMENT PERMISSION NEXT STEP

I will produce RFPs for the Channel Occlusion Reduction ProBono & include Firms I have employed in the past for all aspects including Effectuation & would appreciate REVIEW by Selected Response Teams Responsibility Approval



1



2



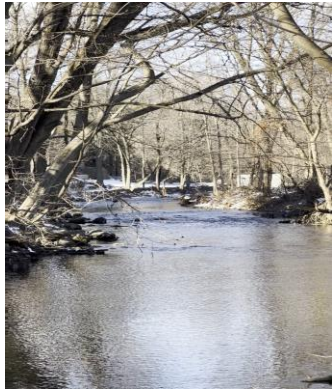
3



6



7



5



4

ENTIRELY ON TOWN PROPERTY
NO INTERRUPTION



7

DEN LOCATION AREA PROCESSING

Initial Implementation Analysis indicates bulk of material suitable for Infrastructure Structural Stabilization

1 to 7 35mm Slides ? No Click on each

ACOE/DEEP POTENTIAL STAGING AREA

