HOLE-IN-THE-WALL PARKING LOT

LONG ISLAND SOUND STORMWATER QUALITY IMPROVEMENTS

PROJECT OVERVIEW

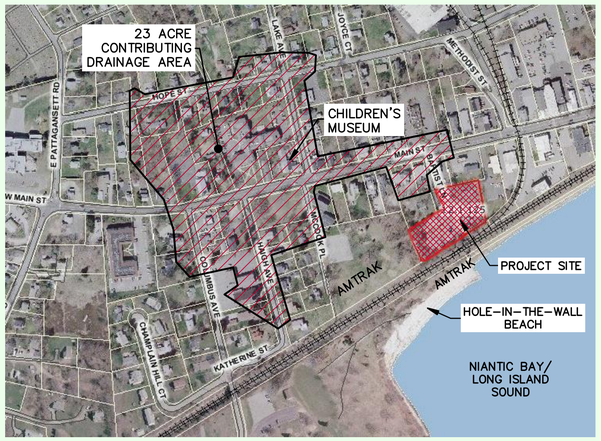
PROBLEM:

23 ACRES IN DOWNTOWN NIANTIC CONTRIBUTED CONTAMINATED STORMWATER RUNOFF INTO THE LONG ISLAND SOUND. CONTAMINANTS INCLUDED:

- PESTICIDES
- FERTILIZERS
- TRASH
- OIL
- BACTERIA (FROM ANIMAL WASTE, ETC.)
- SUSPENDED AND DISSOLVED SOLIDS
  - SAND
  - ORGANICS (DECOMPOSING LEAVES, ETC.)
  - SILT

SOLUTION:

STORMWATER QUALITY IMPROVEMENTS, KNOWN AS BEST MANAGEMENT PRACTICES (BMPs), WERE INCORPORATED INTO THE PARKING LOT TO TREAT STORMWATER BEFORE DISCHARGING INTO THE LONG ISLAND SOUND.



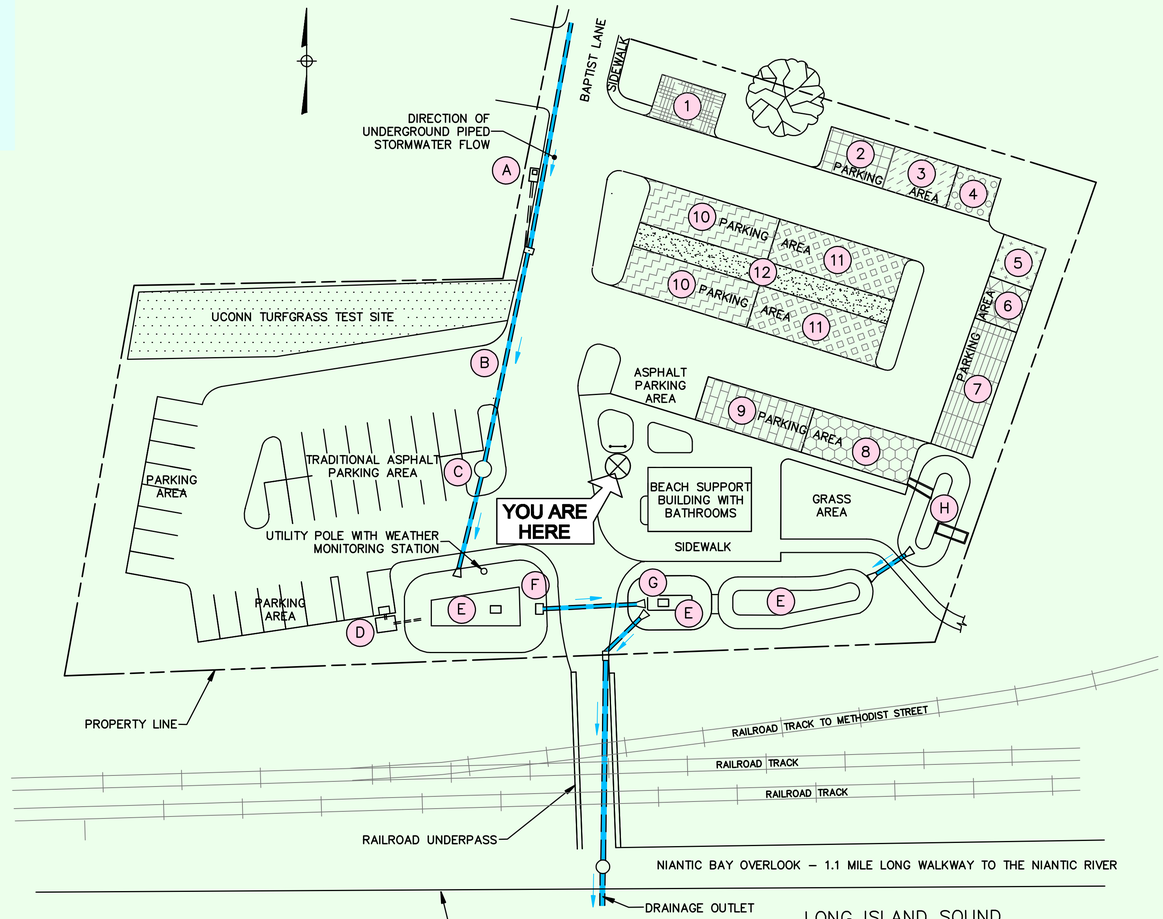
Stormwater Contributing Area Map

Interesting Facts

The Town of East Lyme has created an outdoor stormwater classroom at the Hole-in-the-Wall parking lot located in downtown Niantic adjacent to the Long Island Sound. The parking lot serves as one of two main entrances to the Niantic Bay Boardwalk and local town beaches. The 1.1 mile boardwalk is one of the largest continuous stretches of public access to the shoreline in Connecticut.

The outdoor stormwater classroom contains educational signs posted throughout the parking lot. These signs demonstrate many of the latest technologies and techniques utilized to treat and reduce stormwater runoff before discharging into the Long Island Sound.

In addition to treating 23 acres of stormwater, the goal of the outdoor stormwater classroom is to educate people about the importance of keeping stormwater clean.



Project Site Map

(Plan)

Hole-in-the-Wall Beach

(View Looking East)

Pervious Parking Surface Components

1. KBI FLEXI®–PAVE
2. NETPAVE® 50 WITH STONE
3. NETPAVE® 50 WITH GRASS
4. TURFGUARD
5. ADVANCED TURF®
6. GRASSPROTECTA™
7. NETPAVE® 25 WITH GRASS
8. ECO–STONE® PAVERS
9. AQUA–BRIC® PAVERS
10. TURFSTONE™ PAVERS WITH STONE
11. TURFSTONE™ PAVERS WITH GRASS
12. GRASS FILTER STRIP

Stormwater Treatment Components

- A. FILTERRA® UNIT
- B. UNDERGROUND 18" PIPE CARRYING 23 ACRES OF STORMWATER RUNOFF FROM MAIN STREET
- C. HYDRODYNAMIC SEPARATOR (CDS® UNIT)
- D. RAIN GARDEN
- E. DETENTION/INFILTRATION BASIN
- F. "V" NOTCH WEIR OUTLET STRUCTURE WITH HIGH LEVEL OVERFLOW
- G. DRYWELL WITH TRASH RACK
- H. GRASS DRAINAGE SWALE

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Goodwin College
Environmental Studies Program
One Riverside Drive
East Hartford, CT 06118
(860) 913–2027
www.goodwin.edu

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P.O. Box 174
Niantic, CT 06357
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W.B. Young Building
1376 Storrs Road, Unit 4036
Storrs, Connecticut 06269–4036
www.extension.uconn.edu

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Bruce Morton
Aqua Solutions, L.L.C.
bruce@aquasolutionsllc.com

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www.MCArchitect.com

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The Engineering Technologies Program &
The Architectural Design Program
Three Rivers Community College
574 New London Turnpike
Norwich, CT 06360
(860) 886–0177
www.trcc.commnet.edu

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Educational Corner

Terms to study:

- Stormwater contributing area
- Pervious parking surface
- Stormwater treatment and quality
- Best Management Practices (BMPs)
- Low Impact Development (LID)