



Uretek USA, Inc

## URETEK DEMONSTRATION OF ON-SITU STABILIZATION OF SOILS FOR PENNSYLVANIA DEPARTMENT OF TRANSPORTATION

Demo-location: *State College, PA*

Date: *June 4, 2013*



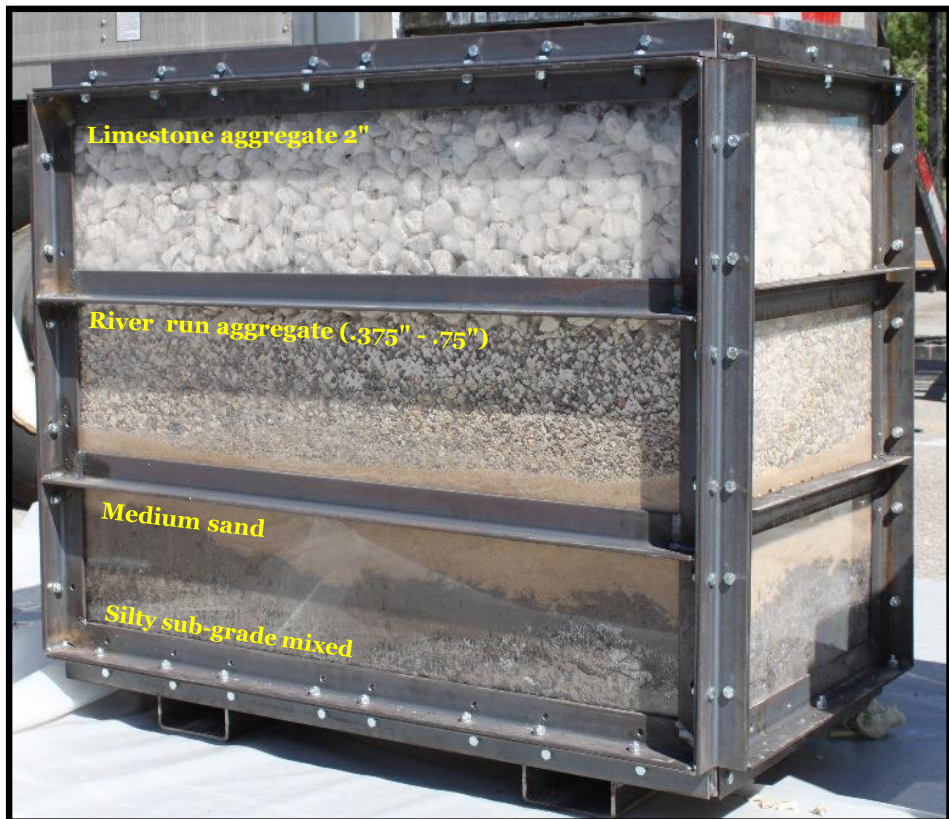
*URETEK recently had the opportunity to illustrate the in-situ stabilization of soils through injection using the URETEK 486 Star structural polymer. The demonstration was conducted for the Pennsylvania Department of Transportation at Pennsylvania State University .*

### Build the Box

Each box was constructed of .75" plywood restrained by 2" x 2" x .125" angle iron and .375" and Plexiglas inserts restrained by 2" x 2" x .25" angle iron.

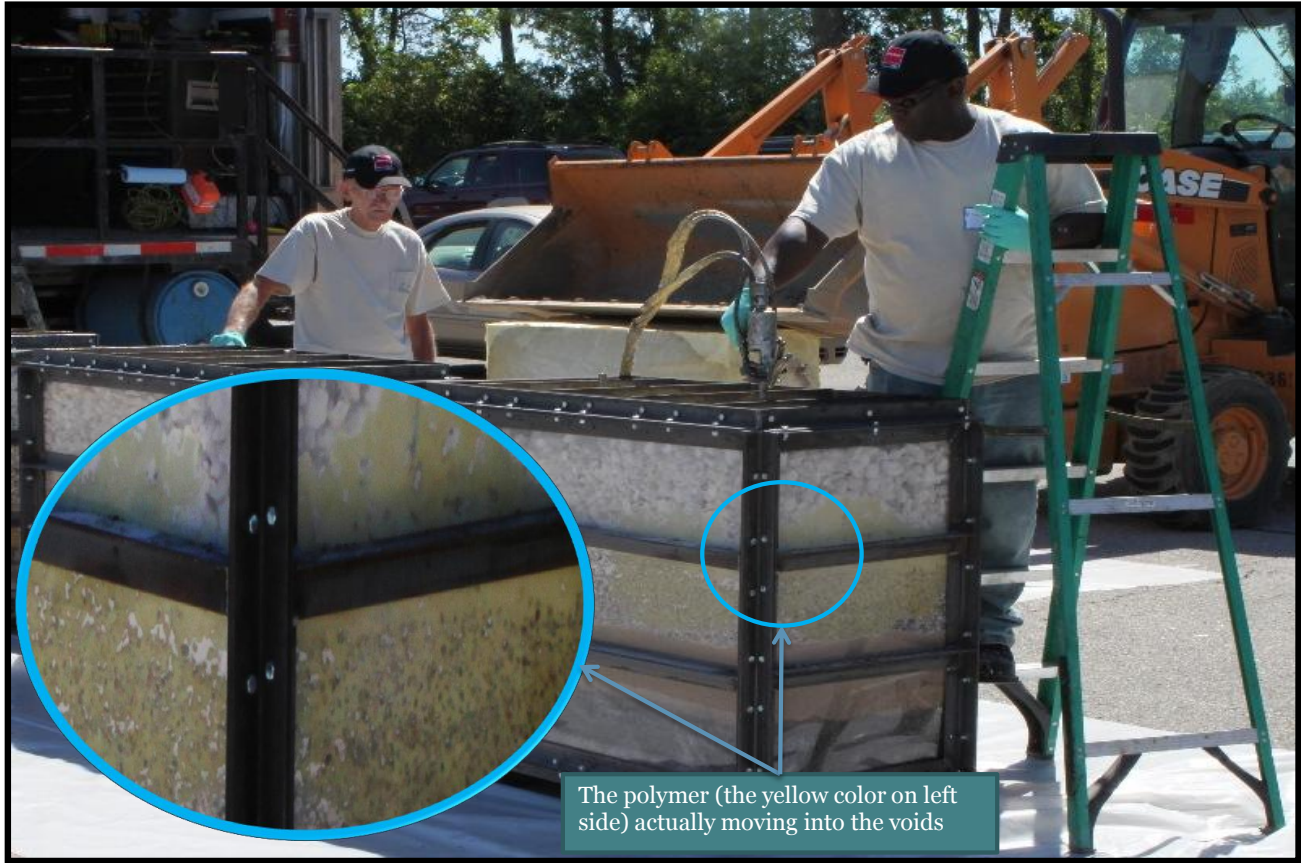
### Filled the Box

Each box was filled with various untreated soils. The first level was 9" of silty sub-grade mixed with RAP. The second level was 6" of medium sand, the third level was river run aggregate (.375" to .75" diameter) and the top level was 2" of limestone aggregate. Each soil layer was rained in from approximately 3 feet height and there was no additional compaction.





The **URETEK** team injected each box with approximately 150 pounds of the URETEK 486 Star 4-PCF



After the boxes were saturated with the 486Star polymer, the boxes were dismantled and the plywood, Plexiglas panels and restraints were removed.





What was left was a substance strong enough to withstand an ad hoc unconfirmed compressive test. Front = 5.5" Rear = 10" GVW = 12,000 lbs.



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