Hilton Garden Inn, Schaumburg, IL

Using Optimized Solutions for Extreme Soil Conditions

Provided By: PPRA



BACKSTORY:

Every quality building begins with a strong foundation. When the existing soil conditions of the building site do not allow traditional poured concrete footings and foundation design, the budget could sink the project.

PROBLEM:

Engineers were faced with solving foundation issues caused by improperly placed fill soil with high moisture content that had been placed atop 3' of buried organic material, reaching depths of up to 18'. This combination made standard foundation construction impossible, prompting engineers to explore alternate solutions like every costly caissons or worse yet, total removal and replacement.

SOLUTION:

Caissons were originally specified to support the foundation, reaching into the stable subgrade below. This support system would require a non-conventional underground piping and construction process; a method that is known to cause delays and increase construction costs. Rock Solid value-engineered a Soil Stabilization process to re-use existing material and avoid non-conventional construction methods, saving money and time.

PHOTOS:

THE PROBLEM





THE PROPOSED APPROACH



THE ROCK SOLID SOLUTION

