

Genzyme Structural Slab Repair

**CERTIFIED
INSTALLER:**

**G. Donaldson
Construction, A
Division of
Hayward Baker**

Engineer:

**Jacobs
Conshohocken, PA**

LOCATION:

Allston, MA



Project Description:

The bio firm has a facility that was slated for equipment upgrades for quality control laboratories. The underlining slab needed to be restored before it could be used. A FILL layer exists under the slab and extends 15 FEET below the surface. Therefore, the slab would require pile supports. Due to low headroom clearance issues and sensitive laboratory vibration concerns, CHANCE™ helical pile foundation system was the support of choice. Slab sections were removed and the helical piles were installed at 5' o/c spacing with construction caps.

CHANCE™ Helical Solution:

- SS175 Solid Square Shafts with 10", 12", 14" helices
- The extensions were RS3500.300 Round Shaft that transitioned after the lead SS175 was installed. The extensions were 5' and 7' sections to accommodate the low head room restrictions.
- The piles were slated to go 25-30 FEET however, most of the piles reached the required torque around 15 FEET just below the FILL layer.
- Design Compression Load = 30 KIPS
- Design Uplift Load = 20 KIPS
- Required Torque = 6000 FT-LBS

