

## DANA FARBER CANCER INSTITUTE

Boston, MA



- **Owner:**  
Dana Farber Cancer Institute, Boston, MA
- **Construction Manager**  
Walsh Brothers, Boston, MA
- **General Contractor**  
J. Derenzo Company, Boston, MA
- **Technique(s) Utilized:**  
Anchors

**A**n expansion of the Dana-Farber Cancer Institute required significant excavation support to accommodate a new 7-story underground parking garage. Nicholson installed 266 permanent tieback anchors through the 3-foot-thick diaphragm wall that created a water-tight excavation. The anchors had capacities up to 900 kips. Many of the anchors were installed under a sensitive power plant structure servicing area hospitals and under a busy city street on the very tight site.

The soils at the site consist of clay over a thick fine sand layer. The bottom of the excavation was about 40 feet below the groundwater table. One of the biggest challenges faced on the project was installing the anchors without having the sandy soil flow into the excavation. A special drill collar, adapted for this project to create a seal between the drill casing and the wall, proved to be extremely successful.