This project entailed construction of a 21-story building with two cellar levels below street grade. A significant portion of the building was cantilevered over the neighboring 3-story building. Ground conditions on the site consisted of low bearing strength soils and shallow groundwater. Excavation required pile supported underpinning of the neighboring buildings and a combination of soldier beam and lagging and steel sheet pile support of excavation walls. Continuous dewatering was also required to maintain dry excavation conditions.

Services provided

- Geotechnical Subsurface Investigation and Report
- Design and Inspection of Underpinning and Support of Excavation Walls
- Design and Inspection of Caisson Foundations
- Design and Supervision of a Monitoring Program
- Decommission and Backfill of Sidewalk Vault

Caisson Installation after Underpinning

Underpinning Pit with Titan Pile

Excavation Inside Second Level Sheetling

First Level Excavation after Underpinning

Caisson Cap Construction at Second Level Excavation

Backfilling First Level Foundation Walls

Backfilling Second Level Foundation Walls

Installation of Titan Piles Prior to Underpinning

Sheet Pile Installation for Second Level Excavation