

CASE STUDY

5 AND 7 STORY BUILDINGS FOR THE NYC HDP WILL STAND ON STELCOR IN THE BRONX

LOADS:

40 tons - 80 kips ultimate compression

PILE DETAIL:

STELCOR 1200
 14" tip or drive plate
 12" corrugated grout column
 9" solid grout column
 8" reverse auger
 5.5" O.D. X 0.361" W.T. - 80 ksi central shaft

EMBEDMENT DEPTH:

28'

TIME FRAME:

Completed within the 7 day time frame

OVERVIEW:

Two 5 and 7 story buildings are being built on Brook Ave by the NYC Department of Housing Preservation and Development (HPD) in the Bronx. Together they will contain 66 affordable housing units.

CHALLENGE:

Originally, 1.75" Helical Pulldown Micropiles were spec'd for this project. After failing 2 load tests using the Helical Pulldown Micropiles (at 20% of the load they settled 4-5"), IDEAL Group and Richard Anastasio partnered to provide an alternate solution using STELCOR Drilled-In Displacement Micropiles. Time constraints and tight site access also weighed on the decision to use STELCOR.

SOLUTION:

Two full scale STELCOR load tests were performed by Procomm Systems and were successfully completed to NYC Building Code standards, at a 23% greater load. The STELCOR test pile's produced a TOTAL NET SETTLEMENT OF .118 INCHES and .072 INCHES. Those net settlement results are not typos. They accurately tell the story of how STELCOR is producing astonishing results. View the borings and load test reports on the following pages. In all, (72) STELCOR DDM's manufactured by IDEAL Group, were installed with an ultimate capacity of 40 tons at an average depth of 27 feet. Installation was completed in 7 days and penalty fines that would have incurred were avoided. The pile count was reduced by 36%.



STELCOR WAS TESTED TO 40 TONS (31 TONS WAS REQUIRED). THE PILE COUNT WAS REDUCED BY 36%

