

## **DRILLED MICROPILES**

(BATTERED / PARTIALLY-CASED)

## Middlesex, New Jersey

July - August 2017

The Army Corps of Engineers selected battered micropiles and driven sheet piles as the appropriate deep foundation solution for a new protective floodwall at the Green Brook Flood Risk Management Project. Along the length of the new floodwall, pairs of angled micropiles straddle a line of driven sheet piles. The micropiles are partially cased with 10.75" O.D. casing and have a central reinforcing bar. Due to a sloping rock profile, drilled depths varied from around 35' to around 70'. Duplex drilling methods were selected and a down-hole-hammer was used to allow for rapid rock socket drilling. Since the new wall parallels an active stream, ground water was very close to working grade – which made for an extremely sloppy work area. Mechanized handling of the drill tools along with high-pressure drilling air allowed for a safe and productive jobsite.

## CDC was able to help the contractor in the following ways:

- Drill rig operation (Comacchio MC15 w/ radio remote control)
- Site supervision, troubleshooting, and quality control suggestions





