PROJECT OVERVIEW AND CHALLENGES

Bradshaw Construction completed 4 drives of 63" Permalok steel casing by microtunneling in Landsdowne, MD. The 4 drives totaled 905 LF and were under CSX and Amtrak railroads, and US-1 and I-895 highways. The microtunnels were completed using a Herrenknecht 1200TC with a Soft Ground cutting head. The tunnels were originally designed to be 72" Hand Mined Liner Plate, but were changed to Permalok steel casing in order to minimize the risk of settlement, and to accelerate the tunneling schedule. 42" RCP was installed as Sanitary Sewer carrier pipe.