



MRCE designed the excavation support systems for a major portion of the CA/T project connecting the highway to the Ted Williams Tunnel and Logan Airport.

Central Artery Third Harbor Tunnel, BMIP Contract C04A1

Boston, Massachusetts

MRCE designed the excavation support system for the construction of the south approach to the Third Harbor Tunnel. The 2300 foot long excavation varied between 90 and 200 feet in width, between 40 and 60 feet in depth, and extended through loose fills, organics and into soft clay. The excavation system support consisted of steel sheet piles laterally supported by 3 to 5 levels of tiebacks anchored in the clay. The use of tiebacks anchored in the soft clays, with the high capacities necessitated by the design, was unique and unprecedented controlled by global wall stability. MRCE's work included a geotechnical investigation, a tieback testing program, development of soil pressure diagrams for the design of the various sections, mass stability analysis, preparation of construction drawings, field inspection of the tieback installation and analysis of the monitoring data.