



Rocket Investments



£14m



76 weeks

Project Overview

Our scope included the removal of asbestos and soft strip in advance of demolition down to the underside of the single basement slab. We also completed substructure enabling works including piling, excavation of 20,000m³ of arisings and blinding to provide a box ready for the construction of the new substructure.

We managed the design and installation of permanent and temporary piling. This included secant piled walls and capping beam construction, installation of main bearing piles for basement excavation and low level bearing piles and localised sheet piling for lift pits. We also installed 18 large diameter, 43m long bentonite base grouted piles to act as foundations for the proposed high-rise tower.



Challenges

We worked closely with London Underground and Network Rail as the Northern Line and other mainline tunnels ran adjacent to and partially below our site footprint. This posed many challenges at different works stages.

During sheet piling we discovered a band of gravels being 1.6m deeper than indicated in the Site Investigation. This meant the piles needed to be founded in what would normally be the Network Rail exclusion zone. The large diameter, base grouted foundation piles were installed on the edge of the same exclusion zone. We used bentonite to reduce the risk of primary displacement.

Through careful monitoring and stringent controls, as part of our Asset Protection Agreement, we completed piling with no impact to the operational railway. We issued summary and interpretive monthly reports to Network Rail.

Our approvals were dependent on making sure there would not be a change in surcharge load on the below-ground tunnel structures. We backfilled the basement with site won crushed concrete to form a piling mat and this maintained the net load on the rail tunnels.

Achievements

Through early negotiation with London Underground and Network Rail we gained the staged approval of the GMA for demolition activities.

We discharged 33 conditions to planning approval on behalf of our client during the demolition phase to allow a clear start for the construction phase.

Agreement of and adherence to an Asset Protection Agreement with Network Rail.

