



## The Challenge

Franki Foundations were approached by a Major Rail Contractor to propose foundation solutions for the platform extensions at South Tottenham Station. The first hurdle when assessing the problem was the extremely tight approach through recently installed new turnstiles to access the working area. In addition to this all pile locations were located on a steep embankments at the end of each platform. The works had to be completed on an extremely tight program to achieve the reopening date of the station.

**The Project** South Tottenham Station Platform Extension

**The Sector** Infrastructure - Rail

**Completion Date** January 2017

**Value** £40K

## The Solution

In order to overcome the tight access Franki Foundations In-house design team designed a solution comprising 150mm diameter steel cased groutmat piles installed to 8m. This allowed us to simply walk Pneumatic Mole machines through the turnstiles to carry out the piling. The solution greatly reduced the amount of enabling works that was required, which consequently had a huge benefit to both cost and program. To overcome piling on an embankment temporary scaffolding was installed as a working platform, because of the light weight equipment being used these did not need to be heavily reinforced.

Following installation the experienced on-site team completed the piles by delivering premixed bags of grout to site daily due to limited storage space/ The premixed grout was mixed with water on site and pumped into the steel cased pile using a P11 grout pump. Due to limited space Franki set the grout pumps on a temporary platform located on track trolleys. In order to assist the client with the tight programme requirements we mobilised two rigs and two crew to site to work simultaneously halving the programme delivering the works ahead of schedule and on budget.

