

Project:

West Hampstead Platform Widening Project

Client:

SWIP (Station Works Improvement Programme) for London Overground

Value:

Current project £1.8 million

Background:

The station at West Hampstead station is served by London Overground, Thameslink and London Underground's Jubilee line. Each train service operates through separate platforms and station buildings. Network Rail is the owner of the station and track infrastructure for the Thameslink and Overground stations.

London Overground has been undertaking a major programme of works to increase the capacity of its train service to meet growing demand. The core of the programme involves increasing the length of the trains from 4 cars to 5 cars, which requires platforms to be lengthened. As West Hampstead is a major interchange, the works at this station include doubling of the width of the platforms from 2m to 4m to cope with the projected increase in traffic.

Work at the station is being carried out in stages. The first phase involves construction of the platform structure for the wider and longer platforms. The second stage involves building a new station entrance to the south of the existing building and a new overbridge to provide access to Platform 2. Platform finishes will also be completed in the second stage.

The work on Platform 2 is further complicated by installation of sheet piling to retain a steep bank. The adjoining land is also undergoing commercial development, restricting access for piling works. Access from the track side is limited by the presence of overhead traction power cables.

London Overground had awarded a contract to Dyer & Butler for the platform extensions

for the whole line, however this did not include the platform widening works at West Hampstead.

London Overground commissioned SWIP to deliver the platform widening works.

SWIP has been established as an internal contracting organisation within London Underground to act as the preferred contractor for TfL/LU upgrade works.

This is a complex project with Network Rail as infrastructure owner having to approve the design and construction method for all works.

initiate's role:

initiate Consulting provided a Project Manager to SWIP to complete implementation of the West Hampstead Platform Widening Project. The role included Project Management, detailed scheduling of site works, regular client and contractor meetings and managing all Third Party interfaces.

A number of issues became evident upon commencement of our role. These included unforeseen ground conditions which forced a change in design of the piling works and delayed the project. The schedule was critical as works on the adjacent property development were forging ahead and access was becoming increasingly restricted for major construction works.

To address this, we proposed a change in the method of installation of the piles. Initially this led to an increase in productivity from 5 sheet piles to 15 sheet piles in each possession. However it soon became evident that even with this increase in output the works would not be completed in time to prevent delay to the adjacent development which was untenable.

To counter this we developed an approach to enable works to be carried out during traffic hours. This needed to be approved by Network Rail (as infrastructure owner) as well as LO as operator, and needed to address the

risks of operating major plant close to OHLE equipment.

Outcome:

The project was running 4 months behind schedule when we were appointed. Following the changes in ways of working proposed by us, the works were completed one month behind schedule – a recovery of three months.