



ABBEY PYNFORD

CASE STUDY

Coram Campus

thomas sinden



Name: Coram Campus

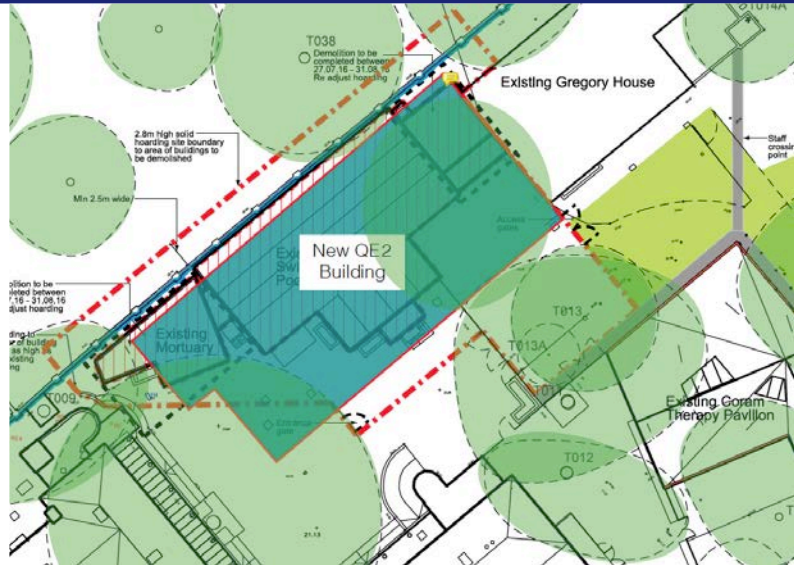
Location: London

Value: £310,000

Site size: 2 units / 922m²

Duration: 13 weeks

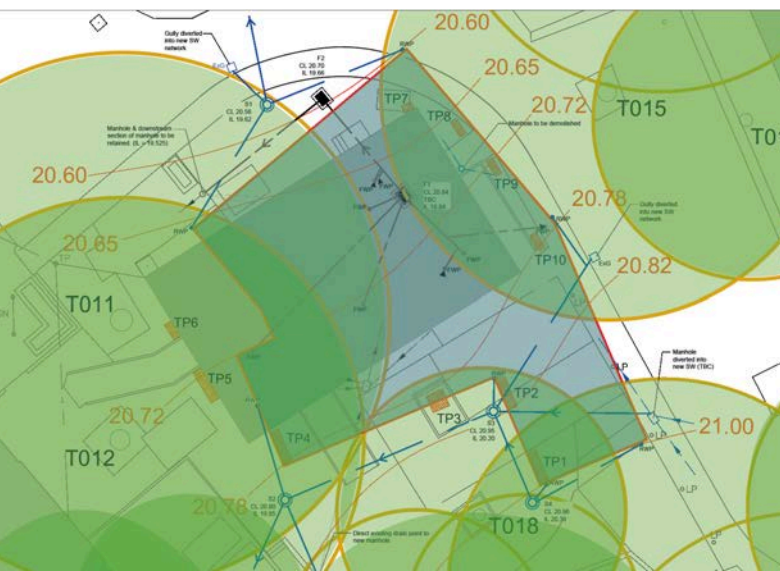
Client: Thomas Sinden Construction



As part of Coram Charity's phased development of their facilities, we designed and built the foundations for the Pavillion and Queen Elizabeth II Centre.

Both sites had considerable Arboricultural constraints due to the number of protected trees that were within the site boundaries and under a Tree Preservation Order (TPO). This meant the main focus of this project was working in compliance with the TPOs while achieving the desired architectural scheme. For us, the most significant consideration of working with TPOs is the root system, called Root Protection Areas (RPA).

A further complication, for the Pavillion site, we also had a low canopy to contend with, and the QE II Centre was adjacent to a Grade II listed wall.



Working with TPO

To work within a TPO the RPA needed to be mapped out to establish the areas in which the foundations and RPA overlapped. Using this mapping, our engineers designed an appropriate scheme using our Treesafe piled raft system. Once on site, each pile within the RPA was hand augered to identify any significant roots. If roots were present, pile positions were adjusted by our in-house design team. As Treesafe is a piled raft system, it can accommodate the relocation of piles easily compared to an alternative piled foundation system.

We also opted for our Concrete Working Surface (CWS) for the operation of our lightweight midi-rig, instead of traditional piling mats. Our CWS is 50mm thick, reducing the excavation required by an estimated 250mm.



Our designers also reduced the pile diameter to 250mm and 300mm, further minimising the risk of conflicting with roots.

Traditionally a pile and beam foundation system would be used. However, by using Treesafe, operating on our CWS, we avoided the excavation for deep caps and beams, which would have extensively damaged the roots and been uncompliant with the TPOs. Our system also minimised drainage depths, passing on further savings to our client.

Working under the Canopy

To accommodate the canopy above, we used a midi-rig with a 10m mast. This midi rig can operate on our CWS (unlike larger rigs) and prevented any damage to the branches above.





Working beside a Grade II listed wall

The listed wall ran close to the site boundary along the back of the proposed QE II Center. The initial primary concern was the potential for the wall to collapse, resulting from ground disturbance. However, due to the reduced level dig our scheme required, the wall foundations were not undermined by deep excavations and avoidable disruption from heavy plant movement.

This work was all carried out under the supervision and with the approval of an Arboriculturist.

All works were completed on time, in budget and, by using Treesafe, our client was able to gain planning permission and increase the project viability.



Get in touch to discuss your project requirements:

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