

# Belmarsh West Prison



## SECTOR:

Basements, Civil Engineering

## OUR ROLE:

Sub Contractor

## LOCATION:

Woolwich

## CLIENT:

Skanska / Serco

## PROJECT VALUE:

£7.5m

## DURATION:

18 months

## OVERVIEW:

Skanska, working with Serco, have undertaken the design and construction of a new prison at Belmarsh West. The new prison is centred around a 600-cell four-storey house block along with associated buildings to provide: education, rehabilitation, training, hospital, sports, healthcare, worship, kitchens, recycling, storage, visiting, administration works, horticulture and security. The Natta contract comprises all enabling, associated ground and external works for the complete new 900 inmate prison with an overall value of £7.5 m.

## SCOPE OF WORKS:

The site was remediated by use of the 'Conform' remediation system, the brownfield site being formerly a munitions works for the Woolwich Arsenal. This remediated platform became the working platform for all the following site works. The Natta package includes Surface & Foul Drainage, including a large diameter precast concrete attenuating surface water system, diversion of the existing prisons foul pumping main. Ground beams, lift pits, pile caps, Ground floor slabs and general foundation works following the installation of the piling.

The site demanded extensive and complex service installation, Gas, Water, Communications, security installed in a very large number of ducts, closely coordinated between the shallow and deep drainage. A high water table combined with poor ground conditions (underlying peat) required extensive use of temporary works, together with complex drainage design solutions. Natta also partnered with Buchan Precast Ltd to carry out the Perimeter Wall works.

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A fast cyclic programme was required to enable Buchans to rotate their temporary propping equipment, while keeping their propping equipment to a minimum and maintaining a fast erect/cast cycle. Natta trialled and purchased a machine laser from Scan Laser to ensure the 360° machine could be kept digging at full capacity to aid programme requirements. The 'externals' outside the wall works include 'Bodpave' access road system to the wall perimeter, visitor and main car park, access roads, extensive landscape bunding and surface water 'Swale', underground fuel tanks, Grease and Petrol Interceptors. A buried Asbestos treatment programme was also carried out. Specialist Contractor Metro Ltd were engaged to carry this out on our behalf.

“Natta’s vision is to add value through innovation, expertise and experience using the safest working practices to meet and exceed clients’ expectations every time.”



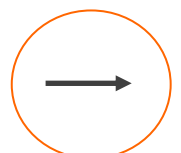
#### SUMMARY:

This contract had a detailed cost plan and contract programme linked to cash flow and resources and also a project quality plan. An allocated Commercial Manager who valued the work monthly in collaboration with the client. The contract finished on time and within the agreed contract sum. Natta has won the contractor of the month award 9 times and was awarded supervisor of the month 6 times in the 19 months we have been on site, with up to 24 companies employed on site at any one time. We also achieved the following KPI Client satisfaction service 9/10 Product 9/10 Delivery to cost 10/10 defects 10/10 (zero defects award) Safety 10/10. Belmarsh was an outstanding success and achieved a BREEM rating of excellence on 9/10 buildings and outstanding on 1. In order to accelerate the works, we collaborated with GLABB, Greenwich Council's in-house co-ordinator to employ local labour to satisfy the requirement. As access to the sensitive site had to be heavily controlled, we implemented a biometrics system and the security of the site was ensured. Two graduate engineers employed on the scheme - 166 employment weeks provided.

Early integration of partner. We introduced specialist partners, who carried out fencing, macadam and HBM supply. Our laying of the HBM material in lieu of a conventional type 1 saved our Client more than £75K in total. This also reduced our carbon footprint by saving a 1,000 tonnes of muck away going to a landfill site 15 miles away and the importation of type 1 limestone which would have travelled more than 100 miles by train and road to be brought to site. Instead the muck was taken 4 miles from site processed into 3/4 HBM and brought back to site on a return load.

Working with the local community was high on both our Clients and our own agendas and we worked to improve the local schools outdoor space (as shown on the photos below), cleaning the areas, laying new paved areas and constructed and filled a number of timber planters for the pupils to grow their own vegetables.

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“A project that required controlling 60 men at peak to the highest safety standards, whilst maintaining production and quality. A feather in cap project.”

**John Dunwoody**

CONSTRUCTION DIRECTOR, NATTA

