SSL | SOIL SCIENCE

CASE STUDY

Hinkley

As part of the National Grid Hinkley Point nuclear power station scheme, 75 piling mats and over 25,000 linear metres of 4m width haul routes with passing bays were required in order to install the power transmission babling.

SUREGROUND™

Reversible Soil Enhancement System

COST SAVING



*Installation - Further reduction for Maintenance & Decom

PROGRAMME REDUCTION



*Reduced from 10 weeks to 6 weeks

CARBON REDUCTION



*Reduced from 31,253.87T to 9,176.63T

AGGREGATE REDUCTION



*Reduced from 202,500T to 64,226T

VEHICLE MOVEMENTS



*Reduced from 11,911 to 3,895

SUREGROUND™ Reversible Soil Enhancement System



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CASE STUDY

Hinkley

Project: Hinkley 400kV OHL Transmission Scheme

Location: From Bridgwater to Seabank

Client: National Grid and on behalf of Balfour Beatty

Area Covered: 175,0000 m²

SUREGROUND™

Reversible Soil Enhancement System

As part of the National Grid Hinkley Point nuclear power station scheme; on behalf of Balfour Beatty, 80 piling mats and over 25,0000 linear metres of 4m width haul routes with passing bays were required in order to install the power transmission cabling.

Soil Science were approached due to their SUREGROUNDTM Reversible Soil enhancement System which offered a number of benefits to the scheme. One of the most prominent of benefits was the offer of a 350mm subbase using site won soils with 100mm Type 1 stone overlay for the piling mats which was a 650mm import saving, due to the traditional design requiring 750mm imported material to yield the same resultant strength. Coupled with utilising site won materials for the haul routes, the lesser reliance on material import, mitigated any programme time delays. The proposal to use SUREGROUNDTM was further supported by improved environmental and commercial performance; as well as greatly reduced local community interface, due to reduced construction traffic.

The design consisted throughout of a 350mm subbase stabilisation with 200mm of treated Type 1 surfacing which formed the armoured surface on the haul routes and achieving in excess of 30% CBR. The piling mats were overlaid with 100mm of unbound type 1 stone in lieu of the armoured layer, which was not required for this element of the installation.

Soil Science took samples from various locations of the site, and sent these away to undertake pre-start laboratory testing, (which included leachate tests to ensure the SUREGROUNDTM binder would not affect the underlying soils) to ensure the success of the product, as well as preparing for the decommissioning stage of the works, so that in due course these areas can be decommissioned back to DEFRA pH and Nutrient indices to ensure the yield of regrowth on previously enhanced soils.

Soil Science mobilised to site undertook topsoil strip and bunded this for subsequent decommissioning.

A dust free system was used to rotovate subsoils with a proprietary binder specifically designed for site soil types encountered at Hinkley Point.









