

Environmental Bulletin

Sustainable Surfacing Solution Passes on Site Use Test

The Hinkley connection project has used a more sustainable option for areas of access road and compound surfacing. The use has resulted in significant environmental, community and project benefits.

The product used was Sureground from [Soil Science Ltd.](#) The solution is mixed on site with the existing subsoil and then compacted. This causes a thermal reaction that hardens the soil, creating a solid road or site compound foundation that is then surfaced.

National Grid and Balfour Beatty conducted a detailed trial to ensure the product was fit for purpose and environmentally safe before it was used for hard standing.

Following the successful trial, Sureground has been used for the compound of the new Sandford Substation.



Environmental/Sustainability Benefits

- Significant Carbon savings, reduction in landfilled waste and total aggregate usage – all feed into key National Grid sustainability targets.
- Approximately 142 tonnes of CO₂ saved compared to traditional methods.
- Trials and testing have proven the product does not leach into the ground and has no adverse effect on surrounding soil properties.

Local Community Benefits

- 66% reduction in vehicle movements - less congestion, reduced impact on local roads, fewer site deliveries and reduced local air quality impacts.

Installation Process Benefits

- Reduced soil storage – as subsoil layers do not need to be removed to attain necessary load bearing capacity.
- Installation time is halved.
- Can be used to stabilise poor quality soils where larger volumes of aggregate would be required.

Easier Restoration

- No geotextile membrane or plastic geogrid used – huge volumes of waste can be avoided and no separation is required.
- The used stone comes up in chunks rather than in individual pieces, minimising stones finding their way into sublayers and becoming a nuisance for landowners
- Quantitative restoration - assessment of end of life soil quality and comparison with DEFRA indices to ensure effective and demonstrable restoration for the landowner.

Lessons Learnt

- Building the option into tenders and early identification of applicable projects can have benefits operationally and commercially, as well as for sustainability.

Actions you need to take...

Consider the use of innovate carbon saving products, such as Sureground on all schemes.

If you need any support or advice, please contact:

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Sandford Resource Comparison		
	Traditional Method	Sureground Product
Area Covered	14,100m ²	14,100m ²
Layer Thickness	500mm	500mm
Cost Saving	N/A	Approx 30%
Maintenance Cost	25% Maintenance Cost	Maintenance Free
Programme Days	40	20
Carbon Emissions	437.5 Tonnes	295.55 Tonnes
Vehicle Movements	940	306
Aggregate Imported	16,920 Tonnes	5,809 Tonnes
Decommissioning Landfill Material	Geotextile Membrane/ Plastic Geogrid	None
All Data provided by Soil Science Ltd.		