

Earthworks

Soil Stabilisation

Site Remediation



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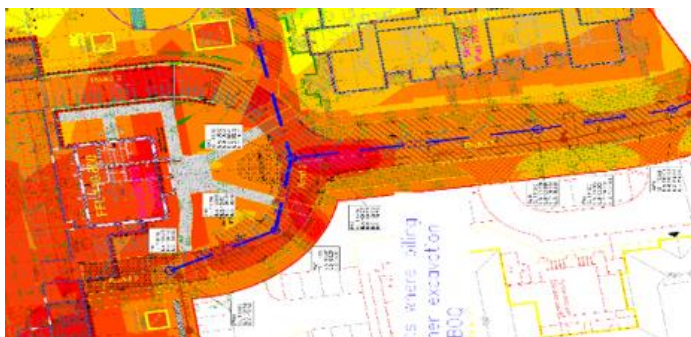
CASE STUDY

Project	FGS 4019 – Adoptable Roads
Location	Wilton Park Beaconsfield
Client	Reynolds Groundwork Services
Key works delivered	Stabilised 300mm Capping Replacement Layer
Project Duration	2 Days
Stabilised Area	1,000m ²
Earthworks	By MC

PROJECT OVERVIEW

Approx. 1,000m² of Adoptable Road on site was considered for Stabilisation of the Capping and Subbase Layers.

Furlong Ground Stabilisation worked closely with the client team and Local Authority on a Stabilised CBM Pavement Foundation Construction.



Designed in accordance with (MCHW)

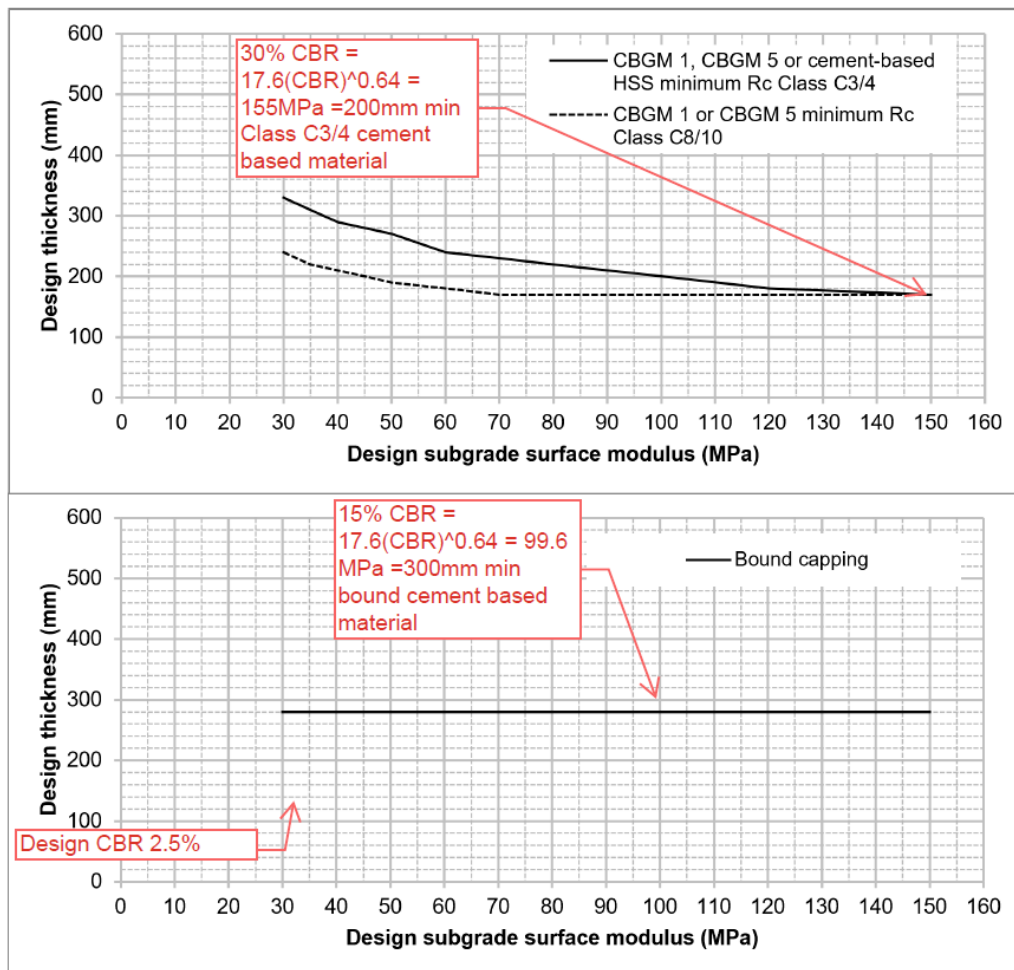
Series 600 CD22 and CC201 Foundations and Pavement Design

Following analysis of the host site won material and Lab Testing of the site won material, Furlong Ground Stabilisation Designed the Capping and Subbase stabilised layers.

CD 225 Design for new foundation pavements (formerly IAN 73/06) and specifically Fig 3.31 – Restricted Design options – class 2 subbase on bound capping.

CC 201 Pavement Foundation Construction testing requirements for restricted & performance foundation options

Figure 3.31 Restricted design options - class 3 subbase on bound capping



FURLONG

Ground Stabilisation

Equipment Selection

Agile and safe operated machinery used on this project due to level changes and working conditions.

Tractor Mounted WS250 Wirtgen Mixer

Tractor Mounted Streumaster SW 3 AC Binder Spreader



Binder Spread and Ready for Mixing



Testing (ITP) and Validation by Furlong GS accordance with (MCHW)

Testing and Validation Plan (per CC 201 & CD 225):

Stage	Test	Frequency / Requirement	Target / Acceptance
Pre-works	Plasticity, Moisture, MCV, WVS Sulphate, TPS / pH	1 per 500 m ³	Conform to Series 600 Table 6/1 & BRES D1
During works	Density / Air Voids (BS EN 13286-2)	1 per 500 m ² / layer	> 95 % MDD, Air Voids < 5 %
During works	EV ₂ Plate Load (CC 201 Cl. 7.2.6)	1 per 1 000 m ²	> 60 MPa (Formation) / > 155 MPa (Bound Capping)
Post-works	DCP correlation or FWD (CD 225 Annex C)	As directed	Confirmation of uniformity and trafficking resistance
Lab Mix Design	UCS / ITSM (BS EN 13286-47 / 49)	Min 2 sets	Compliance with PF2 performance criteria

All testing undertaken by Furlong GS Inhouse Technician

MCV (Moisture Condition Value)



CBR (California Bearing Ratio)



SRT (Sand Replacement Test)



Project and Client Benefits

FURLONG Ground Stabilisation provided a Design and Build package for the Road Capping and Subbase Replacement layers.

Our MCHW (CC201) design enabled our client to utilise Site Won material to create the Capping and Subbase Replacement Layer and save time and money on the project.

