

Vodafone Supporting Technical Information for: –

78234A

39 Whitfield Street

London W1

Site 78234A is required to provide 3G coverage to the Goodge Street area of Central London, particularly the area to the East and South of Goodge Street station, including Tottenham Court Road and Gower Street..

In this area the current Vodafone 3G coverage falls below an acceptable level for a dense urban environment. The proposed site will raise the level of 3G coverage to an acceptable level.

Date Prepared: 7th Jan 2010



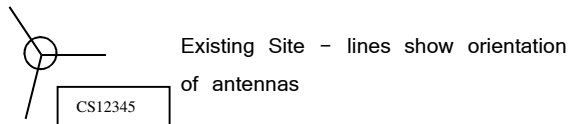
KEY TO COVERAGE PLOTS

The enclosed radio propagation plots are based on Ordnance Survey geographical information.

The level of coverage provided by a particular site is dependant on a number of variables. The main factors which determine the extent of coverage are: the frequency of the signal emitted, the height of the antenna above ground level, the characteristics of the surrounding topography and the type and occurrence of ground clutter such as buildings and trees which can cause 'shadows' or reflections and can absorb the signal.





Vodafone's Radio Engineers have produced accurate visual representations of the level of coverage available in this particular area by using advanced computer modelling software based on a Geographical Information System. The programme takes the numerous variables as above into account and can then calculate and plot the strength of the signal.

Existing and proposed sites are indicated by a circle with site number. The orientation of the antennas is shown by the lines.



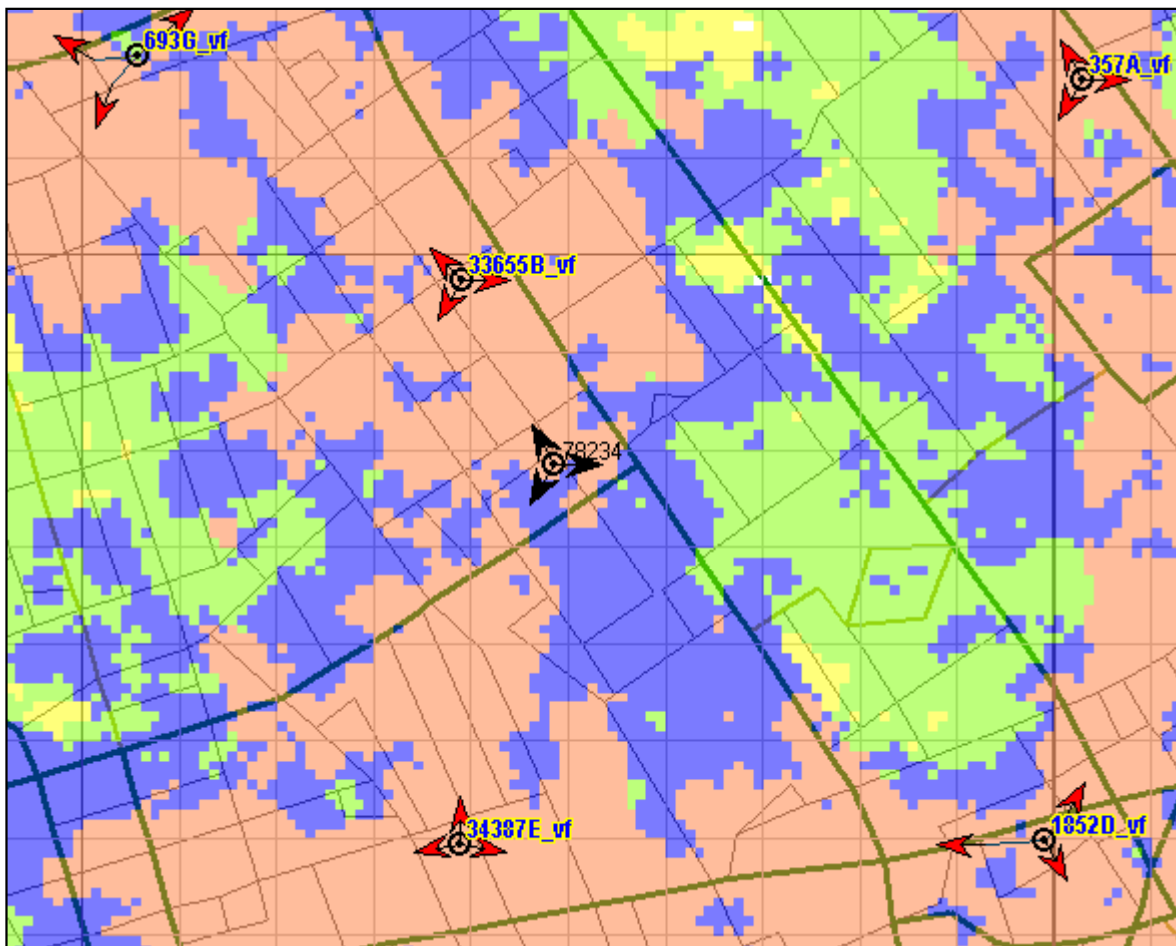
Key for 3G plots

Pink	Sufficient signal strength to provide adequate service for indoor use of a hand portable mobile in urban areas, for example dense residential and industrial areas.	Urban
Blue	Sufficient signal strength to provide adequate service for indoor use of a hand portable mobile in suburban areas or on a train.	Suburban
Green	Sufficient signal strength to provide adequate service for use of a hand portable mobile in a car	In Car
Yellow	Sufficient signal strength to provide adequate service for outdoor use of a hand portable mobile.	Outdoor
No Colour	Insufficient signal strength to provide reliable service.	No Coverage

	-75	Urban
	-83	Suburban
	-91	In Car
	-96	Outdoor



Present 3G coverage without proposed site 78234A



Plot 1 - Present 3G Coverage without site 78234A

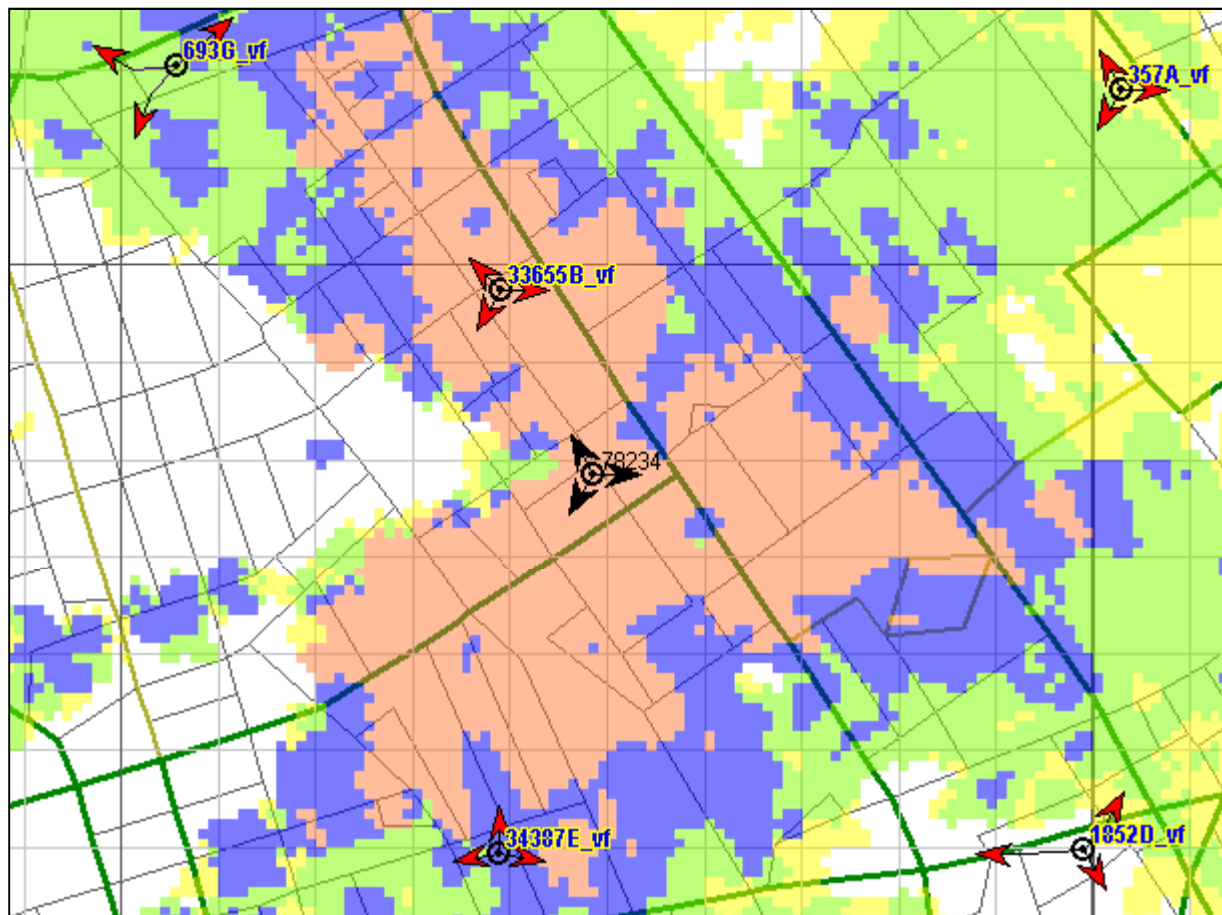
3G Coverage Identified

Date Prepared: 7th Jan 2010

This coverage plan must be read in conjunction with the key and site specific supplementary information.
Each colour block represents 100 metres square.



Proposed 3G coverage from site 78234A



Plot 2 - Proposed 3G Coverage from proposed site 78234A.

3G Coverage Identified

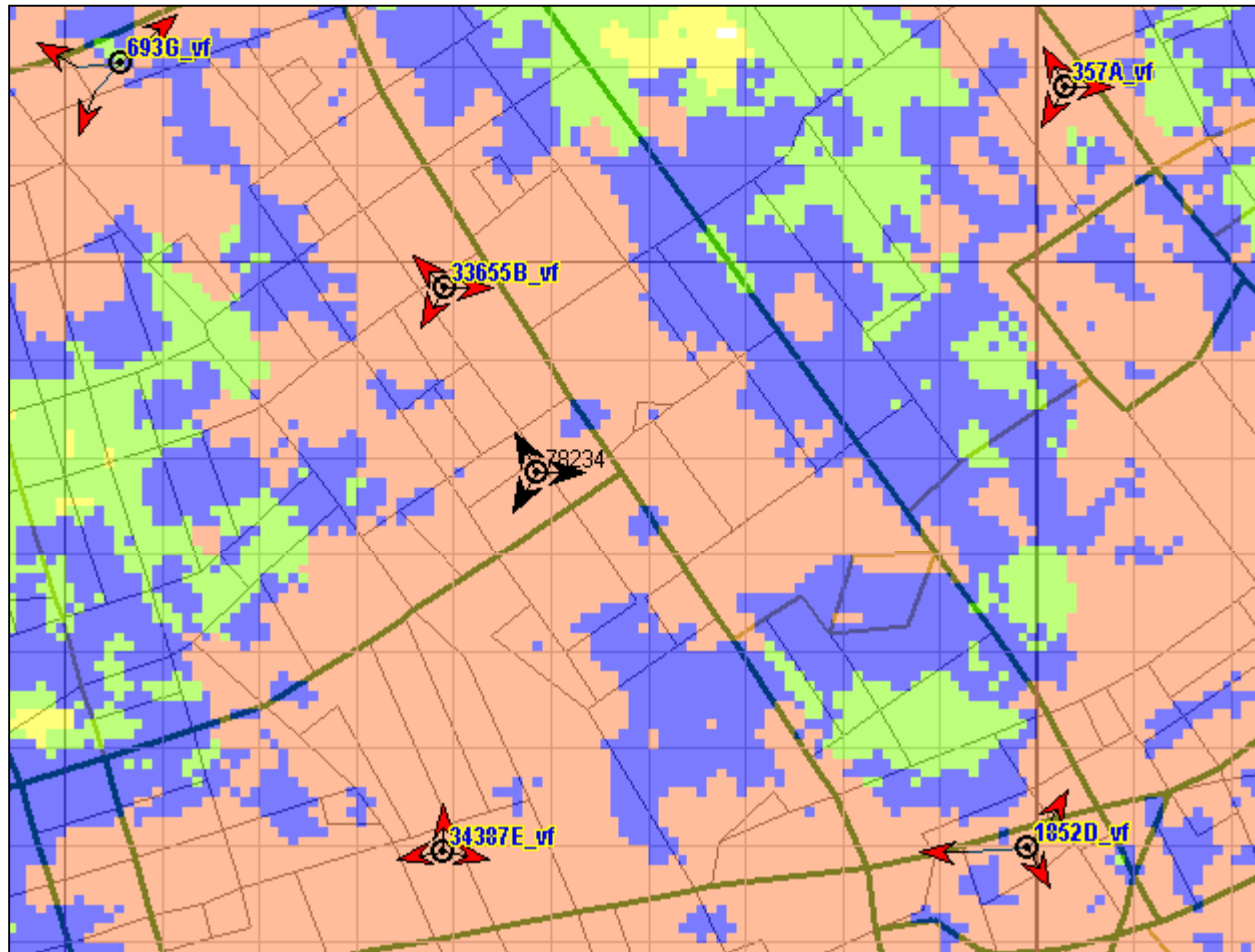
Date Prepared: 7th Jan 2010

This coverage plan must be read in conjunction with the key and site specific supplementary information.

Each colour block represents 100 metres square.



Proposed 3G coverage including site 78234A



Plot 3 - Proposed 3G Coverage with site 78234A.

3G Coverage Identified

Date Prepared: 7th Oct 2010

This coverage plan must be read in conjunction with the key and site specific supplementary information.

Each colour block represents 100 metres square.

