

# P&P Committee Meeting

21 July 2015

## Agenda Item 16

### Mobile Infrastructure Project – Introduction

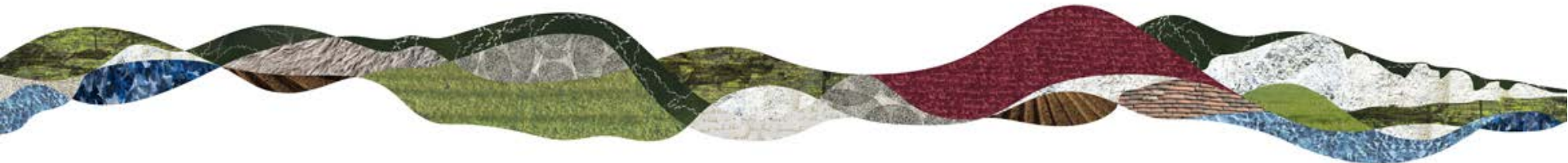
Angie Blowman  
Sustainable Futures Manager



# Partnership Management Plan

Outcome 10 – a diverse and sustainable economy . . .

- Improve availability of mobile phone signals in the National Park
- ‘Not Spots’ Mobile Infrastructure Project



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### Mobile Infrastructure Project





arqiva

# Mobile Infrastructure Project (MIP)

**South Downs National Park Authority**

**Policy and Programme Committee**

**21 July 2015**



# MIP - Overview

- ▶ A publicly funded project to provide mobile phone coverage by all four Mobile Network Operators (MNOs) in areas that have none at present
- ▶ ‘Not spots’: Areas with no effective coverage by **any** of the mobile network operators, usually because it is uneconomic to do so
- ▶ An opportunity to be grasped - tackling market failure to provide mobile coverage to less populated areas
- ▶ State Aid funding means MIP cannot consider areas where there is coverage from at least one (UK) operator, but not from others
- ▶ State Aid funding is for improvements to “voice coverage and basic data”, but all sites will have the connectivity to manage upgraded services
- ▶ Operational & technical challenges – especially connecting the new sites into the MNOs’ networks

# Those involved:

- ▶ **The Department of Culture, Media and Sport** (Broadband Delivery UK) is meeting **the capital cost** of the project
- ▶ **Arqiva** has been contracted to deliver it
- ▶ **Harlequin** are Arqiva's acquisition agents
- ▶ **The four Mobile Network Operators:**
  - Have all agreed to provide a service from all MIP sites for 20 years
  - Have agreed to meet **all the operating costs** of doing so



## Example not spots — containing one or more premises





# MIP - Context

- ▶ MIP is one of the 40 top priority projects in the National Infrastructure Plan
- ▶ The MIP is part of a package to improve and extend mobile coverage
- ▶ The Government is targeting 100% coverage
- ▶ The Government and the MNOs have agreed to extend their coverage requirements from 90% of the UK population to 90% of the UK geographical area by the end of 2017
- ▶ The MNOs will be committing £5 billion towards additional network development
- ▶ In announcing this new initiative, the Government confirmed that it complements the MIP, which in essence is targeting the last 10%
- ▶ Implicit within these targets and announcements is that new mast infrastructure will have to be built and that includes within National Parks and Areas of Outstanding Natural Beauty
- ▶ As well as operational and technical challenges, there are clearly environmental challenges too



# The Benefits of Mobile Connectivity - Safety



# The Benefits of Mobile Connectivity – Agriculture



# The Benefits of Mobile Connectivity

## – Tourism and Business



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“The only thing I could fault was that there is no *mobile phone signal* in the property.”

Review on Expedia of Hotel in South Downs National Park

“Mobile phones

This was of considerable concern to many residents. Among those who discussed the issue:

- There was total support for the view that the poor signal is a major problem.”

*Parish Plan in South Downs National Park*



# The Benefits of Mobile Connectivity – Working from home or on the move





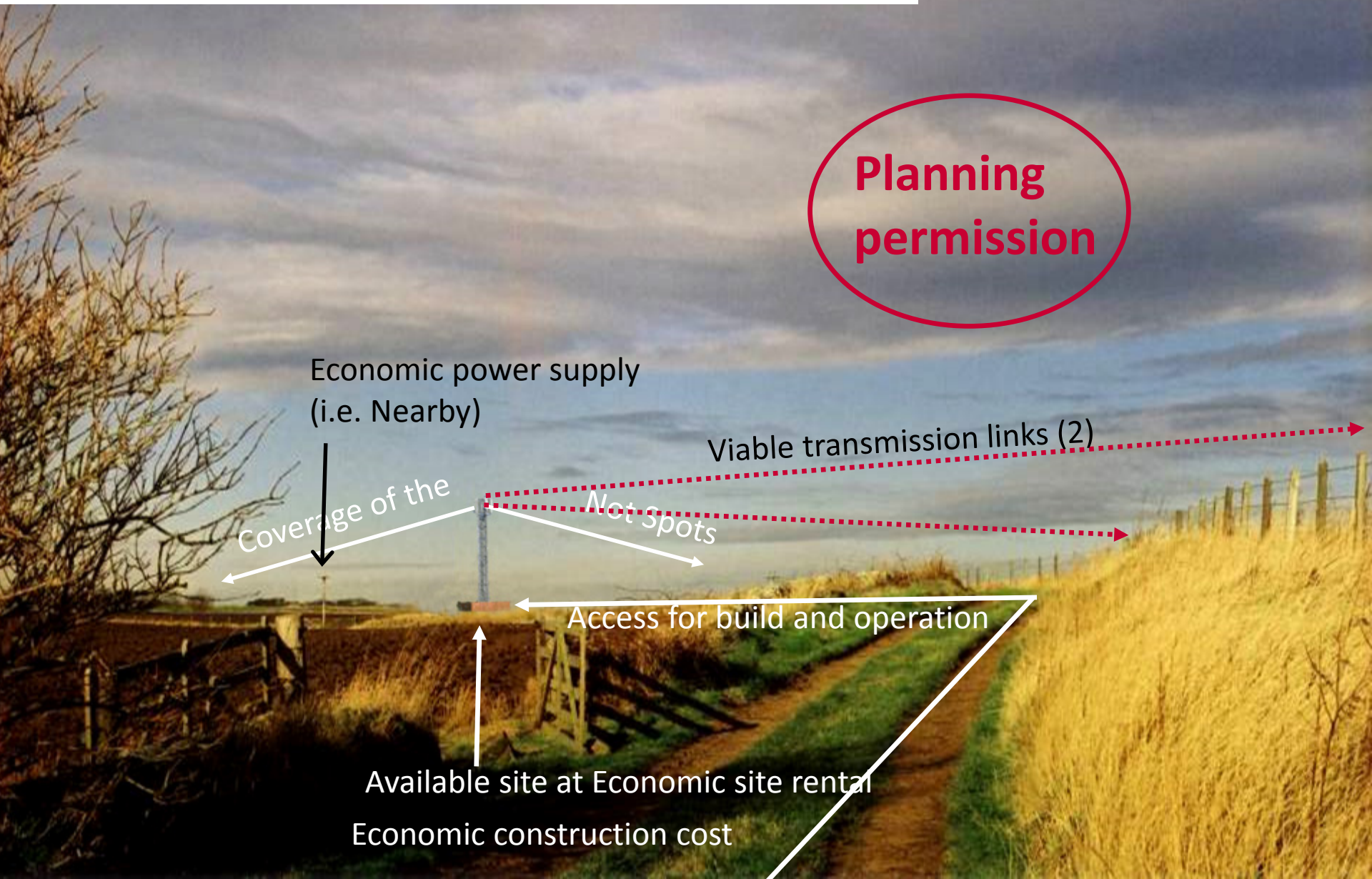
# The Connected World

OFCOM research Consumer Views on the Importance of Communications Services and their Affordability – July 2014

- ▶ Mobile services are now seen as essential or important for most consumers to access voice calls and text-based communication, except for older consumers who continue to rely on landline for voice services.
- ▶ The way that people communicate with each other has changed significantly in the last ten years.
- ▶ Over nine in ten adults now have a mobile phone, using it for voice and text and, increasingly, instant messages and other internet communication.
- ▶ More recently, smartphone ownership and use of internet on the go has increased rapidly, with just over half of UK adults owning a smartphone in 2013.
- ▶ Not Spot areas do not even have 1G level of service
- ▶ As mobile connectivity advances on elsewhere, so the disadvantage increases

The MIP seeks to redress that, but it is a challenging project.

# The Challenge: - All on the same site!







# South Downs NPA - Radio Plan Nominals

Nominal ID	Easting	Northing	Location	County	Local Authority Area
HAM0043	456313	122964	Preshaw	Hampshire	Winchester City Council
HAM3220	463884	114180	Hambledon	Hampshire	Winchester City Council
WES0092*	478191	110170	Walderton	West Sussex	Chichester District Council
WES0127*	477623	114839	Compton & West Marden	West Sussex	Chichester District Council



Nominal with transmission solution available or expected

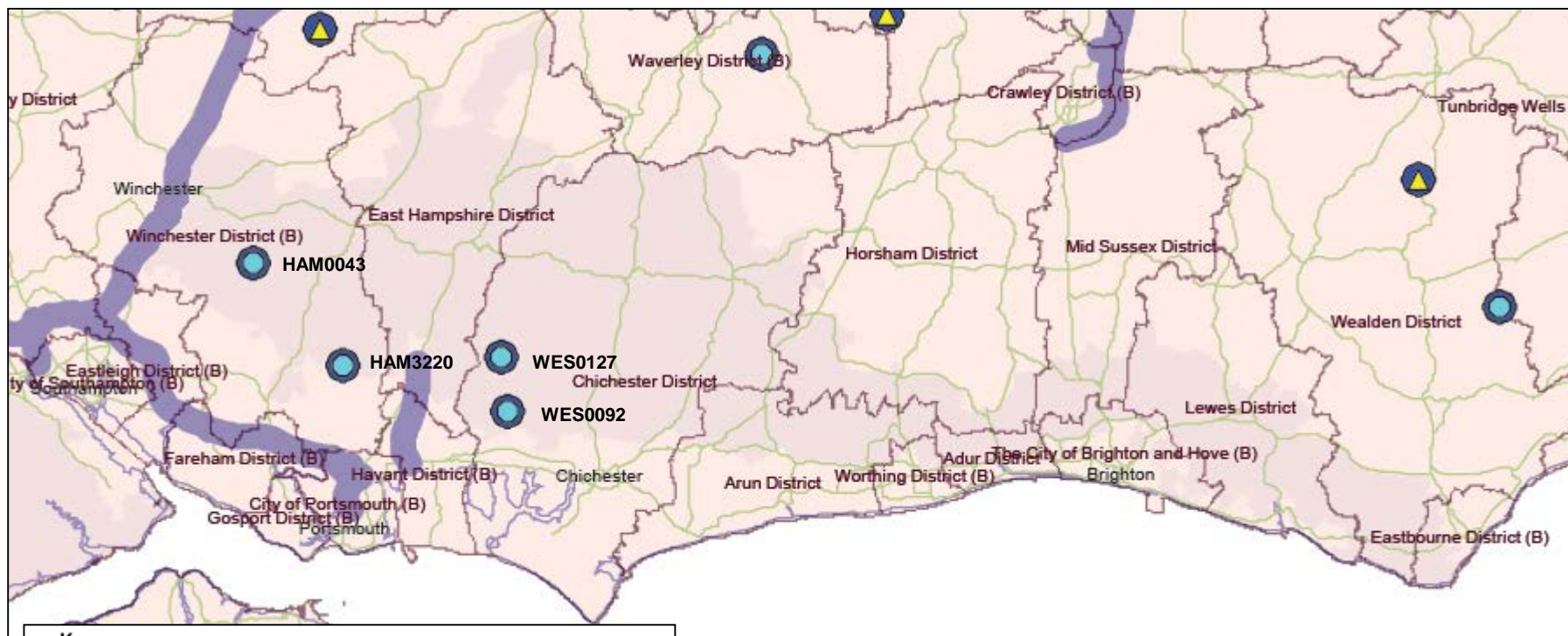


Nominal without transmission solution

\* Nominal carried over from original National Implementation Plan



# Radio Plan - South Downs NPA



## Key



Nominal with transmission solution available or expected



Nominal without transmission solution



Special Transmission Projects



# Nominals Progress

- ▶ Liaison with SDNPA Planning Link Officer on site options
- ▶ HAM0043 Preshaw
  - Original candidate site failed and alternative options being sought in the site search area
  - Early engagement letters sent to the Beauworth, Exton and Upham Parish Councils for feedback on potential sites
  - Response received from Upham Parish Council: ‘...In the recent survey for our Parish Plan whilst 86% of residents identified mobile signal as important or very important to their personal and business life, 2/3 of respondents were either unsatisfied or (40%) very unsatisfied with the current service...The area within the red circle is largely within the two private estates of the Holt and Preshaw and you are no doubt in discussion with both about this issue.’
- ▶ HAM3220 Hambledon
  - Candidate site identified and pre-application consultation underway
  - Hambledon Parish Council is supportive in principle, but has some concerns, including visual impact and has queried whether 4G coverage will be delivered. Additional information has been provided to the parish council to answer the queries

# Nominals Progress Continued



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for Culture  
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- ▶ WES0127 Compton/West Marden: search completed & now assessing site options
- ▶ WES0092 Walderton: candidate site no longer available to us. No other options.



# MIP – Base Station Requirements

- ▶ A lattice radio mast 20 – 30 metres in height
- ▶ Uniquely, to support from the outset the sector and dish antenna of all the MNOs
- ▶ A fenced compound
- ▶ Within which the radio equipment and meter cabinets will be located
  
- ▶ Modern mast designs with all MNOs designed in from the beginning ensures a more sympathetic solution, i.e.:
  - Lighter weight structures than before
  - Symmetry
  - Neater and co-ordinated ground based apparatus
  
- ▶ In other words very different from the way in which single user structures transformed into scrap yards in the sky



# A Typical MIP Installation – 20 metres



(N Molton Devon)



**In wider context**







# Thank You

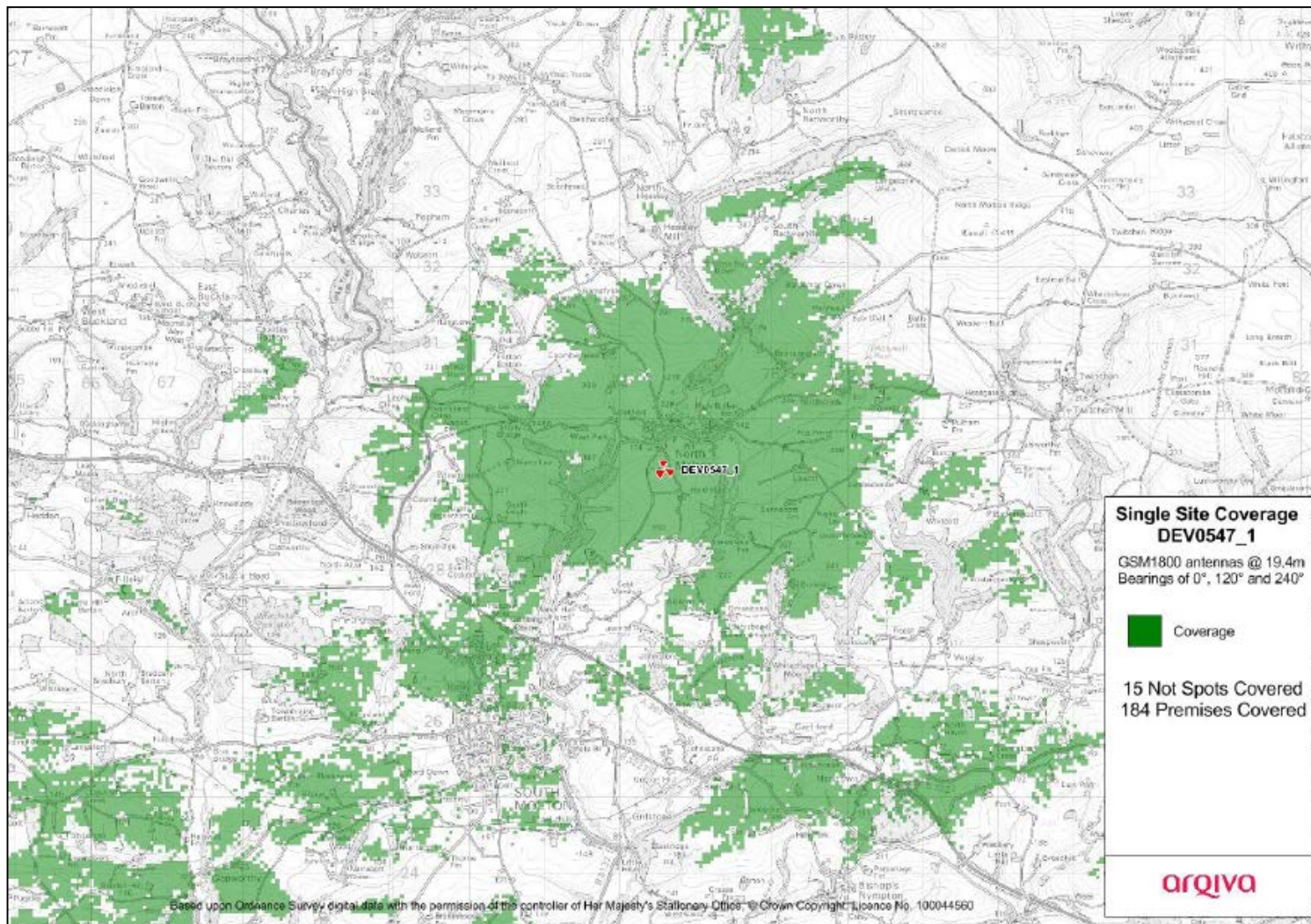
► Any Questions?



# Typical Coverage Plot



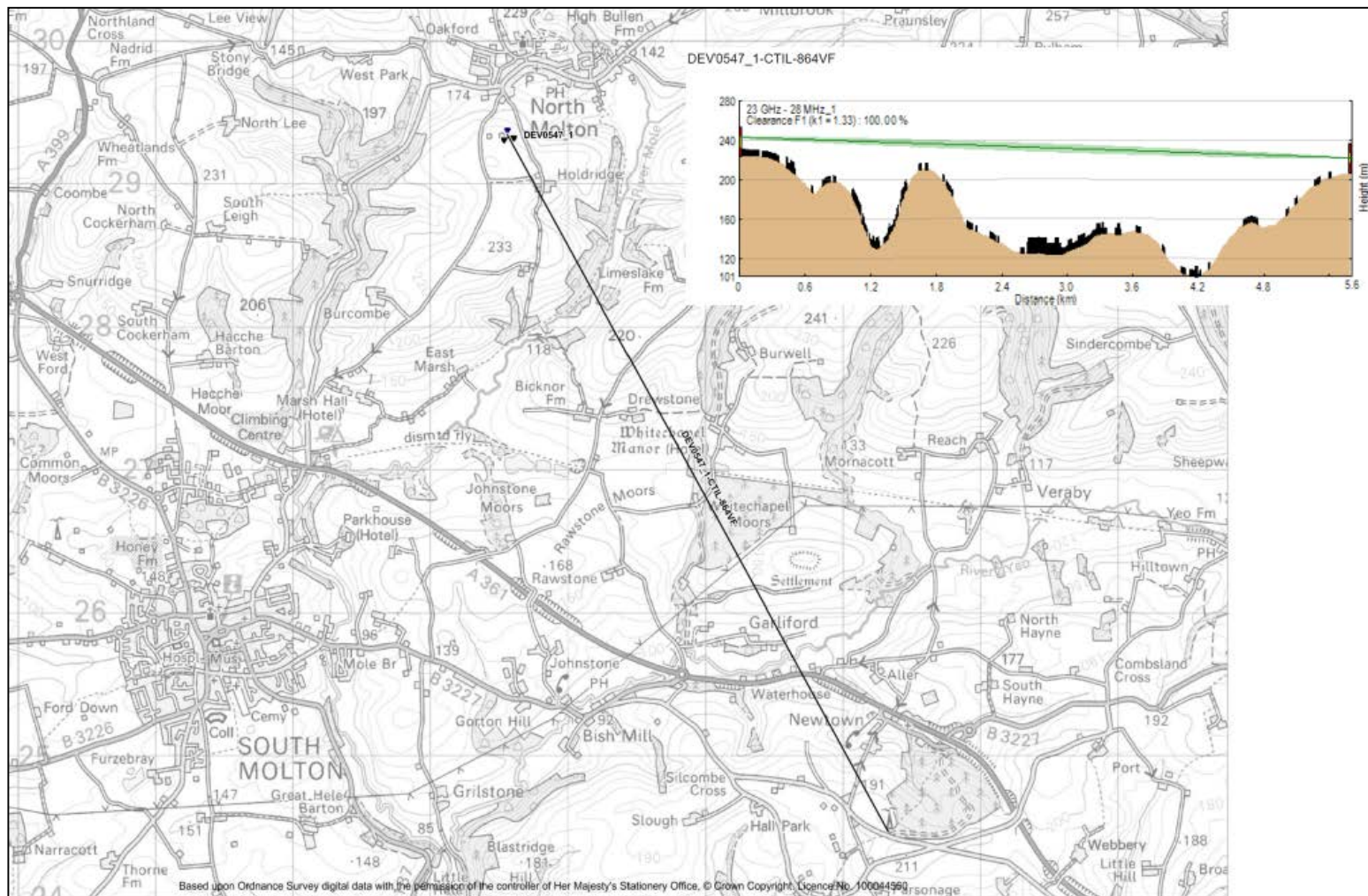
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# Typical Transmission Profile



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# Telecommunications sites in London

