

SUPPLEMENTARY INFORMATION

1. Site Details

Site Name:	Shinfield	Site Address:	Shinfield Road Shinfield Reading Berkshire RG2 9BP
National Grid Reference:	473083 E 168818N		
Site Ref Number:	12140030 VF1264_52	Site Type: ¹	Macro

2. Pre Application Check List

Site Selection (for New Sites only)

(Would not generally apply to upgrades/alterations to existing site including redevelopment or replacement of an existing site to facilitate an upgrade or sharing with another operator)

Was a local planning authority mast register available to check for suitable sites by the operator or the local planning authority?	Yes	No
If no explain why: None available		
Were industry site databases checked for suitable sites by the operator:	Yes	No
If no explain why:		

Site Specific Pre-application consultation with local planning authority

Was there pre-application contact:	Yes/No
Date of pre-application contact:	02/07/2025
Name of contact:	Head of Planning

¹ Macro or Micro

In the first instance, all correspondence should be directed to the agent.

Cornerstone Industry Site Specific Supplementary Information (England) V.9 – 22.03.2024

Registered Address:
Cornerstone Telecommunications, Infrastructure Limited,
Hive 2, 1530 Arlington Business Park, Theale, Berkshire, RG7 4SA.
Registered in England & Wales No. 08087551.
VAT No. GB142 8555 06

 Cornerstone, Hive 2,
1530 Arlington Business Park,
Theale, Berkshire, RG7 4SA

Summary of outcome/Main issues raised:

Pre-application consultation was submitted to the LPA on the above date. The submission included details of the draft proposal in written and plan form. No fee was paid as the fee for pre-application advice far outweighs the cost of submitting a planning application. So no response has been received to date.

Annual area wide information to planning authority

Has annual area wide information been provided?	No
If no explain why:	
Summary issues raised: Cornerstones commercial relationship with the operators has changed, effectively increasing our independence to work with other companies in the deployment of mobile infrastructure. It means we no longer have visibility of Vodafone's full update plan. However, Cornerstone is fully committed to working closely with Local Planning Authorities and following best practice guidance. We aim to engage and work with the planning department at the earliest opportunity from when we are instructed to deliver new infrastructure within your Local Authority area and often conduct strategic pre-rollout engagement meetings to discuss our wider rollout. If your Local Authority would like a meeting to discuss wider Cornerstone rollout plans then please advise. We recognise the importance of developing long term partnerships and will always work with you to deliver improved mobile connectivity.	

In the first instance, all correspondence should be directed to the agent.

Cornerstone Industry Site Specific Supplementary Information (England) V.9 – 22.03.2024

Registered Address:

Cornerstone Telecommunications, Infrastructure Limited,
Hive 2, 1530 Arlington Business Park, Theale, Berkshire, RG7 4SA.

Registered in England & Wales No. 08087551.

VAT No. GB142 8555 06



Cornerstone, Hive 2,
1530 Arlington Business Park,
Theale, Berkshire, RG7 4SA

Community Consultation

Rating of Site under Traffic Light Model:	Red	Amber	Green
Outline of consultation carried out: The site lies outside any sensitive land use designations and is well screened by mature trees which provide a backdrop and context for the site. There are no nearby schools, care homes or hospitals and any trees nearby protected by TPO's will be entirely unaffected by the proposed development. It was therefore only considered necessary to contact:- Councillor Andrew Gray Councillor Jackie Rance Councillor Vishal Srinivasan Letters were sent out on 02/07/2025.			
Summary of outcome/main issues raised (include copies of relevant correspondence): No response received from any party to date.			

School/College

Location of site in relation to school/college (include name of school/college): There are no nearby schools or colleges close enough to the site to be affected by the proposal. The nearest care home is Magnolia Lodge located over 230m to the SE. however there are multiple intervening buildings and belts of high level trees to ensure that there will be no undue impact on the property.
Outline of consultation carried out with school/college (include evidence of consultation): N/A
Summary of outcome/main issues raised (include copies of main correspondence): N/A

In the first instance, all correspondence should be directed to the agent.

Cornerstone Industry Site Specific Supplementary Information (England) V.9 – 22.03.2024

Registered Address:

Cornerstone Telecommunications, Infrastructure Limited,
Hive 2, 1530 Arlington Business Park, Theale, Berkshire, RG7 4SA.
Registered in England & Wales No. 08087551.
VAT No. GB142 8555 06

 Cornerstone, Hive 2,
1530 Arlington Business Park,
Theale, Berkshire, RG7 4SA

Civil Aviation Authority/Secretary of State for Defence or the operator of the civil safeguarding area or defence safeguarding area notification (only required for an application for prior approval)

Will the proposed development be on a civil safeguarding area or a defence safeguarding area?	Yes	No
Has the Civil Aviation Authority/Secretary of State for Defence/operator of the civil safeguarding area or defence safeguarding area been notified?	Yes	No
Details of response:		

Developer's Notice

Copy of Developer's Notice enclosed?	Yes	No
Date served:	14 th August 2025	

In the first instance, all correspondence should be directed to the agent.

Cornerstone Industry Site Specific Supplementary Information (England) V.9 – 22.03.2024

Registered Address:
 Cornerstone Telecommunications, Infrastructure Limited,
 Hive 2, 1530 Arlington Business Park, Theale, Berkshire, RG7 4SA.
 Registered in England & Wales No. 08087551.
 VAT No. GB142 8555 06

 Cornerstone, Hive 2,
 1530 Arlington Business Park,
 Theale, Berkshire, RG7 4SA

3. Proposed Development

The proposed site:

The application site lies on the north western outskirts of Shinfield to the south of the M4 motorway. It lies to the rear of the Shinfield Arms Public House (formerly known as The Black Boy), off Shinfield Road to the rear of the car parking area adjacent to the boundary with the embankment which leads to the M4 on the northern side of Shinfield.

The existing 15m mast lies approximately 30m to the south of the M4 carriageway, on land which is approximately 5m higher than the motorway. However, the mast is not visible from the motorway due to the intervening belt of high level trees. It is also not visible from Shinfield Road or Old Shinfield Road. It is only visible within the car park to the rear of the public house at close quarters and perhaps from other back land areas to the rear and south of the site.

The site does not lie within or close to a conservation area. The nearest listed building, Lane End Farmhouse which is Grade II listed and lies on the opposite side of the road to the public house, some 73m to the south east of the application site. It is however screened from view by the intervening buildings and vegetation.

No TPO's will be affected by the proposed development. Whilst there are some trees nearby which are protected by TPO, they are not close enough to the application site to be affected by the proposal.

The site lies within the Special Protection Area Linear Mitigation Zone, CS Policy CP8, Scale and Location of Development proposals: Countryside/ Shinfield, CS Policies CP9 and CP11 and Affordable Housing Thresholds: Outside Development Locations/ Within all development locations, CS Policy CP5. It lies within an SSSI Impact Risk Zone, within an Air Quality Management Area and Potentially Contaminated Land Consultation Zone, none of which would impact on the ability to install the proposed development.

Planning History

Prior to 2000 there was an 8m monopole with 3 no antennas on the site. Details of any previous application do not appear on the LPA's website.

Planning Application ID 001891 or TL/2000/2435- Proposed replacement of existing mast with a 12m mast and 6 no. antennas and extension to existing equipment cabin.
Approved 15 November 2000

Applications before 1998 not available on the Council's website.

In the first instance, all correspondence should be directed to the agent.

Cornerstone Industry Site Specific Supplementary Information (England) V.9 – 22.03.2024

Registered Address:

Cornerstone Telecommunications, Infrastructure Limited,
Hive 2, 1530 Arlington Business Park, Theale, Berkshire, RG7 4SA.

Registered in England & Wales No. 08087551.

VAT No. GB142 8555 06

 Cornerstone, Hive 2,
1530 Arlington Business Park,
Theale, Berkshire, RG7 4SA

View looking northwards towards the mast from within the car park to the public house.



Enclose map showing the cell centre and adjoining cells if appropriate:

Location Map:



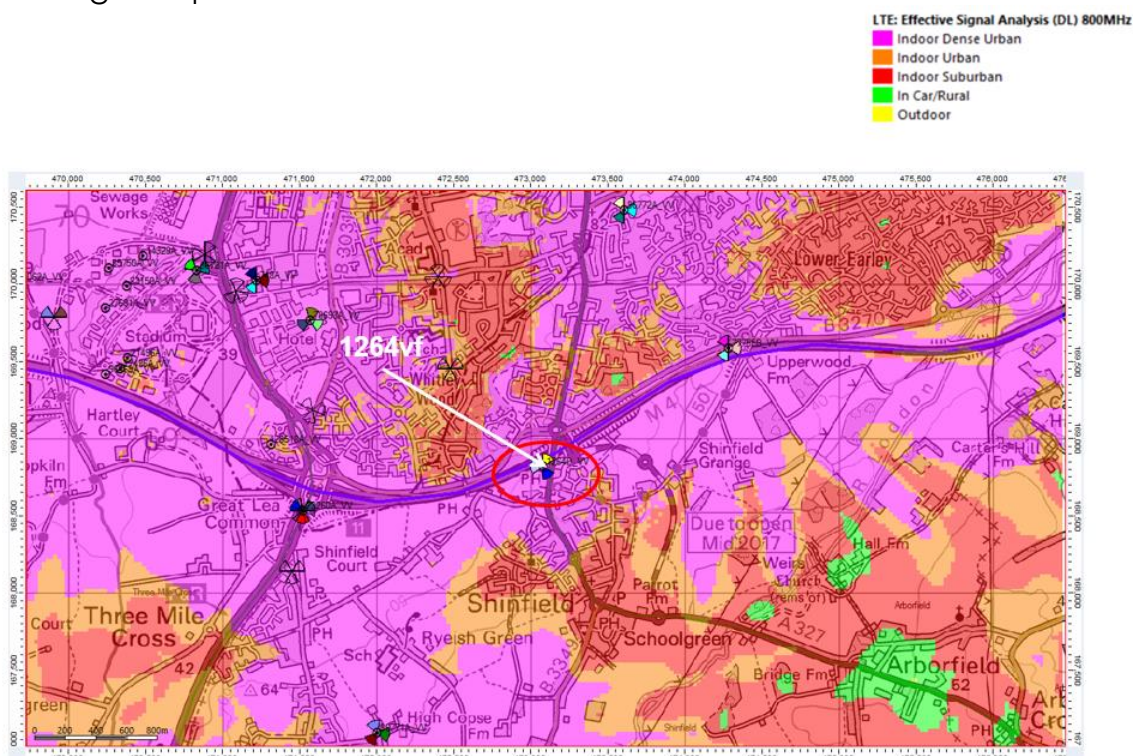
In the first instance, all correspondence should be directed to the agent.

Cornerstone Industry Site Specific Supplementary Information (England) V.9 – 22.03.2024

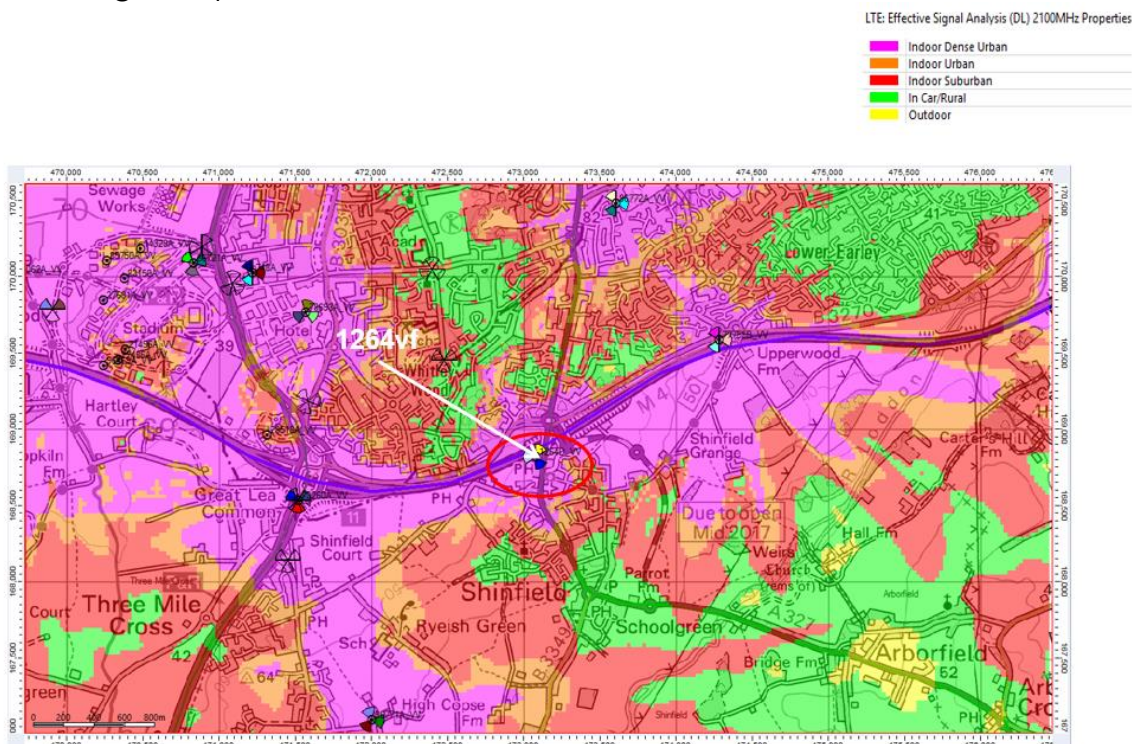
Registered Address:
Cornerstone Telecommunications, Infrastructure Limited,
Hive 2, 1530 Arlington Business Park, Theale, Berkshire, RG7 4SA.
Registered in England & Wales No. 08087551.
VAT No. GB142 8555 06

 Cornerstone, Hive 2,
1530 Arlington Business Park,
Theale, Berkshire, RG7 4SA

L800 Coverage Map:



L2100 Coverage Map:



In the first instance, all correspondence should be directed to the agent.

Cornerstone Industry Site Specific Supplementary Information (England) V.9 – 22.03.2024

Registered Address:

Cornerstone Telecommunications, Infrastructure Limited,
Hive 2, 1530 Arlington Business Park, Theale, Berkshire, RG7 4SA.

Registered in England & Wales No. 08087551.

VAT No. GB142 8555 06



Cornerstone, Hive 2,
1530 Arlington Business Park,
Theale, Berkshire, RG7 4SA

Type of Structure (e.g. tower, mast, etc):	
Description: The installation of a 15m Phosco Phase 4.5m monopole supporting 6 no. antennas C/W 4.9 Headframe on existing pad and proposed pad extension, 1 no. 0.3m dish, the removal of the existing 15m Phase 2.0 monopole, 6 no. antennas & 3 no. combiners on existing monopole headframe and development ancillary thereto	
Overall Height:15m	
Height of existing building (where applicable):	Metres
Equipment Housing:	
Length:	Metres
Width:	Metres
Height:	Metres
Materials (as applicable):	
Tower/mast etc – type of material and external colour:	Phosco Phase 4.5 monopole c/w 4.9 Headframe (Grey)
Equipment housing – type of material and external colour:	Existing equipment cabin (Green)

Reasons for choice of design, making reference to pre-application responses:
The design of any communications infrastructure is dictated primarily by operational requirements and secondly by the development's setting. From an operational perspective, the operator must ensure the following when devising a final design solution for any site:- Antennas need to be located at a height and specifically orientated to transmit effectively and efficiently without signal being impeded. They also need to be located to ensure ICNIRP compliance. Dish links (if required) achieve a direct line of sight connection with other base station sites within the network; and GPS modules achieve a direct satellite link. To achieve this operators undertake panoramic assessment to determine what is the minimum height for transmission equipment to be located in the context of local topography and clutter, such as manmade or natural features, and what antenna tilts and orientation are required to provide an effective solution. Please be aware that modern network technologies operate in higher frequency bands than older technologies and therefore attenuation of the radio signal is naturally higher and more prone to the effects of clutter. This

In the first instance, all correspondence should be directed to the agent.

Cornerstone Industry Site Specific Supplementary Information (England) V.9 – 22.03.2024

Registered Address:
 Cornerstone Telecommunications, Infrastructure Limited,
 Hive 2, 1530 Arlington Business Park, Theale, Berkshire, RG7 4SA.
 Registered in England & Wales No. 08087551.
 VAT No. GB142 8555 06

 Cornerstone, Hive 2,
 1530 Arlington Business Park,
 Theale, Berkshire, RG7 4SA

means that operators will normally require a higher structure to achieve the same coverage footprint.

It is also imperative that the supporting structure is structurally capable of accommodating the amount of transmission apparatus being proposed and the design is ICNIRP compliant.

In all cases the operator is committed to limiting the size and amount of apparatus to an operational minimum.

In this instance, the proposal aims to provide better coverage to the area and improve connections to outlying areas more generally. It was not considered necessary to increase the height of the mast. However, in order to improve coverage to the local area a new mast is proposed which enables the antennas to be more spread out and introduces a 0.3m transmission dish. This will enable a full remote deployment. Everything will migrate from Coaxial cable to Fibre so will suffer less losses and provide improved connections. The compound and on site equipment cabin will remain the same as existing. The existing pad foundation will be extended to support the new monopole. All redundant equipment will be removed from the site. None of the surrounding trees will need to be lopped, topped or felled.

In the first instance, all correspondence should be directed to the agent.

Cornerstone Industry Site Specific Supplementary Information (England) V.9 – 22.03.2024

Registered Address:

Cornerstone Telecommunications, Infrastructure Limited,
Hive 2, 1530 Arlington Business Park, Theale, Berkshire, RG7 4SA.

Registered in England & Wales No. 08087551.

VAT No. GB142 8555 06

 Cornerstone, Hive 2,
1530 Arlington Business Park,
Theale, Berkshire, RG7 4SA

Health and Safety - including ICNIRP compliance

The International Commission on Non-Ionizing Radiation Protection Declaration has been included with the application.

International Commission on Non-Ionizing Radiation Protection public compliance is determined by mathematical calculation and implemented by careful location of antennas, access restrictions and/or barriers and signage as necessary. Members of the public cannot unknowingly enter areas close to the antennas where exposure may exceed the relevant guidelines.

When determining compliance, the emissions from all mobile phone network operators on or near to the site are taken into account.

In order to minimise interference within its own network and with other radio networks, the operator in this proposal, Vodafone Ltd, operate their network in such a way that the radio frequency power outputs and kept to the lowest levels with effective service provision.

All operators of radio transmitters are under a legal obligation to operate those transmitters in accordance with the conditions of their licence. Operation of the transmitter in accordance with the conditions of the licence fulfils the legal obligations in respect of interference to other radio systems, other electrical equipment, instrumentation, or air traffic systems. The conditions of the licence are mandated by Ofcom, an agency of national government, who are responsible for the regulation of the civilian radio spectrum. The remit of Ofcom also includes investigation and remedy of any reported significant interference.

The proposed replacement telecommunications cell site, that is the subject of this application, accords with all the relevant legislation and as such will not cause significant and irremediable interference with other electrical equipment, air traffic services or instrumentation operated in the national interest.

In the first instance, all correspondence should be directed to the agent.

Cornerstone Industry Site Specific Supplementary Information (England) V.9 – 22.03.2024

Registered Address:

Cornerstone Telecommunications, Infrastructure Limited,
Hive 2, 1530 Arlington Business Park, Theale, Berkshire, RG7 4SA.
Registered in England & Wales No. 08087551.
VAT No. GB142 8555 06



Cornerstone, Hive 2,
1530 Arlington Business Park,
Theale, Berkshire, RG7 4SA

4. Technical Justification

Reason(s) why site required e.g. coverage, upgrade, capacity

The applicant is seeking to provide an improved 2G, 3G and 4G cell site and to establish new 5G connectivity services to those living, working and travelling in the following area:

Shinfield Road
Shinfield
Reading
Berkshire
RG2 9BP

The dynamic nature of technological advances in the telecommunications industry coupled with ever increasing demand from subscribers dictates a continual reinvestment programme on the part of the licenced operators mean operators are constantly developing their networks as well as refining and modernising their infrastructure.

As this site is located very close to the M4, this major transport corridor requires good telecommunications connectivity.

When planning cellular telecommunications networks engineers use specialist software to predict, with a high degree of confidence, the behaviour of cellular transmissions. This then enables the operator to calculate how many cell sites are needed to provide the level of coverage and capacity required by their customers.

Radio signals at the frequencies used for cellular radio propagate in a manner that is broadly similar to light. Generally anything that casts a shadow to light will attenuate radio waves. The strength of radio signals detected at a receiving device naturally reduces the further away it is from the transmitter. In general, the attenuation (or decay) in signal power is affected by a number of variables. The main factors are:

- signal frequency (attenuation increases with frequency),
- distance (from the transmitter),
- terrain (such as hills),
- clutter (such as buildings, foliage, vehicles, and water) and
- atmospheric conditions (such as rain).

A reduction in the strength of the radio signal increases the likelihood of dropped calls and reduced data rates for internet browsing, for example.

In the first instance, all correspondence should be directed to the agent.

Cornerstone Industry Site Specific Supplementary Information (England) V.9 – 22.03.2024

Registered Address:

Cornerstone Telecommunications, Infrastructure Limited,
Hive 2, 1530 Arlington Business Park, Theale, Berkshire, RG7 4SA.
Registered in England & Wales No. 08087551.
VAT No. GB142 8555 06



Cornerstone, Hive 2,
1530 Arlington Business Park,
Theale, Berkshire, RG7 4SA

Clutter

Any physical object obstructing the propagation of radio signals causes a reduction in the signal strength reaching a customer's device. A common term for these objects is 'clutter'. The more obvious examples are buildings and geographical terrain such as hills and trees.

Buildings cause a varying amount of signal reduction depending on their height, construction, thickness of walls, number of windows etc. Glass causes a lower reduction in signal than brick/concrete walls.

Customers will inadvertently be aware of this by finding that sometimes they need to go near windows, a higher floor of a building or even outside in order to achieve a stronger signal for their mobile devices.

Generally, the higher the signal frequency the more it will be impacted by clutter.

Tree Clutter

The effects of trees on signal degradation can be significant. Signal absorption and shadowing effects vary according to vegetation and density, and are caused by the main tree trunk, branches, and leaves.

Cell sites located in or near trees will have signals significantly reduced. As a result, a number of extra sites may need to be built locally in order to counter-effect this.

Signal variation throughout the seasons is also a practical concern. Leaves on trees in the spring and summer can cause shadowing and reduce radio voice quality and increase the number of dropped calls.

As a result, the bottom of an antenna should a) be above the top level of the trees, b) allow greater height due to the antenna down-tilt at build or for future requirements and c) allow some room for future growth of the trees.

When a cell site utilises point-to-point microwave dishes to communicate with other cell sites in the network any obstruction between these dishes will result in failed line of sight communications. As a result, dishes need to be placed above the top level of the trees.

Propagation Models

In essence these are mathematical formulae used to characterise radio wave propagation, in order to determine the signal strength at a receiving device.

In the first instance, all correspondence should be directed to the agent.

Cornerstone Industry Site Specific Supplementary Information (England) V.9 – 22.03.2024

Registered Address:

Cornerstone Telecommunications, Infrastructure Limited,
Hive 2, 1530 Arlington Business Park, Theale, Berkshire, RG7 4SA.

Registered in England & Wales No. 08087551.

VAT No. GB142 8555 06

 Cornerstone, Hive 2,
1530 Arlington Business Park,
Theale, Berkshire, RG7 4SA

Coverage Planning Tools

Radio planning engineers plan cellular networks using highly sophisticated computer programs that incorporate propagation models. Armed with data on cell site location, cell site configuration, maps, terrain etc. they are used to *predict* areas of coverage deficiency (so called 'coverage holes'), new site requirements and configurations.

Network Changes

Over time the topography and clutter in an area may change. For example, building developments, housing and tree growth can all change. As the signals received from local phone masts can degrade, as they are dependent on these factors. These reasons along with increased usage of mobile devices, customer complaints, network consolidation (mast sharing) and new technologies (5G) require a re-evaluation of a network operator's telecommunications infrastructure.

Mast sharing can result in some masts no longer being needed. As a result, they are decommissioned and physically removed. Mast sharing will however sometimes result in the need for a taller more substantial structure.

Technical surveys undertaken for reasons above may highlight that antenna height increases are required – this is more likely for sites with low antenna heights around 15m AGL, particularly street furniture sites. More details on these reasons below.

While thus far this document is generic to mobile telephony masts it should be noted that each mast has to be dealt with on a case-by-case basis.

5G Technologies

5G New Radio technologies operate in higher frequency bands than older technologies. Since it operates at higher frequencies where attenuation of the radio signal is naturally higher, and the effects of clutter are greater it will normally require a higher structure to achieve the same coverage footprint. Furthermore, unlike traditional technologies 5G uses adaptive beamforming technologies to increase capacity and data speeds to the user. For effective beamforming the antenna will normally need to be mounted higher than conventional antennas. These factors drive a require for an increase in antenna height in 5G

International Commission on Non-Ionizing Radiation Protection (ICNIRP) Compliance
The addition of new technologies and mast sharing affects ICNIRP compliance, one of the health and safety requirements for a cell site, a higher minimum mast height is required in some cases.

In the first instance, all correspondence should be directed to the agent.

Cornerstone Industry Site Specific Supplementary Information (England) V.9 – 22.03.2024

Registered Address:

Cornerstone Telecommunications, Infrastructure Limited,
Hive 2, 1530 Arlington Business Park, Theale, Berkshire, RG7 4SA.
Registered in England & Wales No. 08087551.
VAT No. GB142 8555 06

 Cornerstone, Hive 2,
1530 Arlington Business Park,
Theale, Berkshire, RG7 4SA

5. Site Selection Process

Alternative sites considered and not chosen (not generally required for **upgrades/alterations to existing sites** including redevelopment of an existing site to facilitate an upgrade or sharing with another operator)

Site Type	Site name and address	National Grid Reference	Reason for not choosing site
-----------	-----------------------	-------------------------	------------------------------

N/A

If no alternative site options have been investigated, please explain why:

No alternative sites have been sought in this instance as the proposal represents an upgrade to an existing telecommunications site.

Land use planning designations:

The site does not lie within or close to a conservation area. The nearest listed building, Lane End Farmhouse which is Grade II listed and lies on the opposite side of the road to the public house, some 73m to the south east of the application site. It is however screened from view by the intervening buildings and vegetation.

No TPO's will be affected by the proposed development. Whilst there are some trees nearby which are protected by TPO, they are not close enough to the application site to be affected by the proposal.

The site lies within the Special Protection Area Linear Mitigation Zone, CS Policy CP8, Scale and Location of Development proposals: Countryside/ Shinfield, CS Policies CP9 and CP11 and Affordable Housing Thresholds: Outside Development Locations/ Within all development locations, CS Policy CP5. It lies within an SSSI Impact Risk Zone, within an Air Quality Management Area and Potentially Contaminated Land Consultation Zone, none of which would impact on the ability to install the proposed development.

Additional relevant information (include planning policy and material considerations):

Demand and Expectation

The dynamic nature of technological advances in the telecommunications industry coupled with ever increasing demand from subscribers dictates a continual

In the first instance, all correspondence should be directed to the agent.

Cornerstone Industry Site Specific Supplementary Information (England) V.9 – 22.03.2024

Registered Address:

Cornerstone Telecommunications, Infrastructure Limited,
Hive 2, 1530 Arlington Business Park, Theale, Berkshire, RG7 4SA.

Registered in England & Wales No. 08087551.

VAT No. GB142 8555 06



Cornerstone, Hive 2,
1530 Arlington Business Park,
Theale, Berkshire, RG7 4SA

reinvestment programme on the part of operators and as a result, and in line with licence requirements, companies such as Cornerstone are constantly developing, refining and modernising mobile network infrastructure.

Ofcom discussion paper 'Mobile Networks and Spectrum' (09 February 2022) considers the future demand for mobile services, encouraging longer-term thinking about spectrum for mobile networks and how consumer and business needs can be met. Section 2 of the paper includes the following information under the subheading 'The growth of the mobile':-

Paragraphs 2.5-2.7

"In the UK there are four Mobile Network Operators (MNO's)- EE, THREE, Virgin Media O2 and Vodafone. The MNO's also provide wholesale mobile access to many mobile virtual operators' (MVNOs) such as Tesco, iD (Carphone Warehouse). Sky Mobile and others.

In recent years we have seen an average 40% year-on-year growth in demand for mobile services provided over public mobile networks. This growth has been driven by the proposal of new mobile applications and enabled evolving technologies and consequent changes in consumer behaviour. We expect demand for mobile data will continue to grow as we rely on it ever more to carry out daily activities like shopping, gaming, banking and watching movies. Demand is likely to be stimulated further as new and more sophisticated applications are developed, and by the proposal of machine to machine and machine -to-device applications. "

In publishing the above, Ofcom welcomed stakeholder inputs on the initial thinking, including on the potential opportunities and challenges associated with network densification in the UK and whether there are opportunities for more spectrum to be made available for mobile use on a local basis, so that they may then develop a future strategy for mobile spectrum.

Following on from the above, a conclusions paper was published by Ofcom on 06 December 2022 entitled 'Ofcom's future approach to mobile markets and Spectrum 4, within which Section 1 entitled 'Overview' paragraph 1.1 confirmed:

"We expect demand for mobile data to continue to grow as greater use is made of data-hungry services and new technologies enable new uses."

How mobile networks operate

The reader may be aware that cellular networks are made up of a series of individual cell areas, each of which has a base station within it that has a maximum capacity for

In the first instance, all correspondence should be directed to the agent.

Cornerstone Industry Site Specific Supplementary Information (England) V.9 – 22.03.2024

Registered Address:

Cornerstone Telecommunications, Infrastructure Limited,
Hive 2, 1530 Arlington Business Park, Theale, Berkshire, RG7 4SA.

Registered in England & Wales No. 08087551.

VAT No. GB142 8555 06



Cornerstone, Hive 2,
1530 Arlington Business Park,
Theale, Berkshire, RG7 4SA

traffic (i.e., the number of handset users that can connect to it at any one time). A good analogy for describing a cellular network is that of a patchwork quilt with each cell area being one of the many patches that are sewn together making up the network 'quilt'. The base stations themselves will require a supporting structure, such as a mast or high building, to support antennas and dish and to elevate such transmission equipment above clutter, such as tall trees and buildings and whilst taking account of topography, all of which that could impede signal, and to ensure ICNIRP compliance. Associated cabinets for housing radio equipment and power connections are also deployed to service the antennas.

Telecommunications base stations receive and transmit to mobile devices using radio waves. The antennas operate like an aerosol spray with signal transmitted along a central orientation and dissipating with distance whereas transmission dish links (which are required where fibre connections are not available) operate on a direct line of sight basis, linking with dishes on other base station sites elsewhere within the wider network. The dish or fibre links also connect the base station to a master control centre that manages the call handover process that occurs when a mobile user moves from one cell area to another, whilst also providing telemetric monitoring to ensure the site is working properly and offer remote maintenance.

Mobile connectivity, service and capacity is required where customers live, work, travel and enjoy recreational time. In the early days of mobile communications, peripheral locations, high-level topographies and large-scale masts were often identified in order that transmission from a new base station could cover an expansive geographical area. However, whilst this approach was viable for early network generations, the number of mobile device users and the need for connectivity has dramatically increased with time, as have the advancements in mobile technology itself. Quite often it can be the case that although a degree of coverage is available in an area, demand exceeds the base station's capacity meaning that calls, text and data usage services are not available to all those wishing to use the network. As a result, the cellular network construction and operational criteria have changed over time too. Because modern networks use higher frequencies with faster data rates, which don't travel as far as earlier frequencies, whilst serving significantly increased numbers of mobile device users, typical network cell areas (i.e., the geographical area targeted for coverage and capacity for which a base station proposal provides a solution), are now smaller in their geographical expanse and tend to be directly proportionate to the number of users within it. They are also, therefore, greater in their number with base stations operating at a lower power output than their predecessors.

It is also critical to understand that the UK's 4No. Mobile Network Operators (MNOs) all utilise different technology spectrums to provide their mobile service. The spectrums the Operators utilise are allocated by Ofcom, as industry regulator on behalf of UK Government, through licence agreements with each of the individual MNOs. As such,

In the first instance, all correspondence should be directed to the agent.

Cornerstone Industry Site Specific Supplementary Information (England) V.9 – 22.03.2024

Registered Address:

Cornerstone Telecommunications, Infrastructure Limited,
Hive 2, 1530 Arlington Business Park, Theale, Berkshire, RG7 4SA.

Registered in England & Wales No. 08087551.

VAT No. GB142 8555 06

 Cornerstone, Hive 2,
1530 Arlington Business Park,
Theale, Berkshire, RG7 4SA

each MNO must utilise the spectrum licenced to them. Each part of the radio frequency (RF) spectrum has variations in terms of frequency propagation. Additionally, these networks have all developed independently of each other, such that each has they will have their own particular location requirements for cell solutions. Therefore, each individual MNO's network, and their sharing arrangements, cannot be compared directly and there will be variations in how each of these networks is deployed and developed. For these reasons, all MNOs, including Vodafone have completely different network configurations that they need to fit within and build the network service around. As such, the individual networks will have variations in how their infrastructure is deployed and developed.

Public Benefit

It is undeniable that mobile communication is now a key part of sustainable proposal and a vital tool in our personal lives and in all business and government operations. Indeed, as the demand for faster and improved mobile connectivity continues to grow with modern society now expecting to be able to make use of mobile devices to their full potential where people live, work and travel. Each new generation of mobile communications technology has provided us with higher speed, better connection, and many more advanced features on our mobile device, and now with 5G, we can expect to experience an even more extensive range of telecommunication services. There is, therefore, currently a drive by the Government to ensure that all communities have access to the most up to date mobile technology, given the clear sustainability, social, environmental, and economic benefits for doing so.

Good connectivity allows people to access a wide range of essential services and a further explanation on some of these key benefits is provided below:

Economic benefits

Creating more productive and cost efficiencies for businesses.

Businesses offering online services can extend their products to a broader audience.

Local areas and businesses can benefit from tourists and visitors as hotels, attractions, and restaurants can be booked online from anywhere in the world.

Business owners and services like doctors can provide a faster and more cost-effective service by offering both online appointments and ordering. Digital connectivity facilitates economic growth, something which the Government is keen to progress and promote.

5G's ability to deliver real-time information (low latency), ultra-fast speeds (critical for high-definition images and video), increased capacity and

In the first instance, all correspondence should be directed to the agent.

Cornerstone Industry Site Specific Supplementary Information (England) V.9 – 22.03.2024

Registered Address:

Cornerstone Telecommunications, Infrastructure Limited,
Hive 2, 1530 Arlington Business Park, Theale, Berkshire, RG7 4SA.

Registered in England & Wales No. 08087551.

VAT No. GB142 8555 06

 **Cornerstone, Hive 2,**
1530 Arlington Business Park,
Theale, Berkshire, RG7 4SA

heightened security will also facilitate learning on the job procedures, thanks to technologies such as Augmented Reality (AR) goggles, which, for example, can give the likes of engineer's real-time instructions on how to fix a machine on a production line.

Social benefit

Mobile communications can help people to stay in touch wherever and whenever, which can help improve social wellbeing.
Convenient access to online commerce or businesses.
Contacting emergency services is easier, especially in remote areas.
Giving the ability to manage our personal finances and information 24/7.
Using a mobile wherever you go can provide better personal security-
Having access to social networking sites and applications can keep people entertained with their lifestyles and interests.
Access to real-time transport information or timetables-Smart meter reads for utilities such as gas or electric or contacting local authorities.
Promotion of smarter and productive ways of working. For example, working from home can help minimise commuting which can provide better work and home life balance.

Sustainability and Environmental benefits

Facilitating remote access to services, education, and commerce, reducing the need to travel and in turn minimising carbon emissions.
Better monitoring and control of energy consumption through climate change technology, smart metering and smart energy grids.
5G infrastructure requires fewer heat generating electronic components.
5G enabling of the Internet of Things (IOT) sensor deployment can manage and alert us to pollution risks, health hazards and flood risk.
Provision of smart technologies within the agricultural sector will facilitate more efficient and less wasteful practices helping to limit negative impacts.
5G networks allow monitoring of traffic flow resulting in less congestion and better air quality. They also make driverless cars possible; a means of transport that offers better fuel efficiency.
Smart cities and buildings can rely upon 5G networks to enable buildings and infrastructure to use automated energy saving through better and more efficient lighting, heating, cooling and other operations.

Education benefits

Facilitates access to educational establishment databases or booking systems for securing places for the likes of school dinners, field trips, extra-curricular activities, student/teacher reviews, etc.

In the first instance, all correspondence should be directed to the agent.

Cornerstone Industry Site Specific Supplementary Information (England) V.9 – 22.03.2024

Registered Address:
Cornerstone Telecommunications, Infrastructure Limited,
Hive 2, 1530 Arlington Business Park, Theale, Berkshire, RG7 4SA.
Registered in England & Wales No. 08087551.
VAT No. GB142 8555 06

 Cornerstone, Hive 2,
1530 Arlington Business Park,
Theale, Berkshire, RG7 4SA

Provides access to school/college/university apps for setting and submitting homework/coursework, ensuring news and notifications are delivered efficiently, and for parent/student/teacher interactions. The relationship between 5G and education is evolving at a massive rate with educators exploring the relevance of Virtual Reality (VR) technologies for education and training. Crucially, VR can support remote learning, allowing students a presence in the classroom even when working elsewhere.

5G's ability to deliver real-time information (low latency), ultra-fast speeds (critical for high-definition images and video), increased capacity and heightened security will also allow learning on the job, thanks to technologies such as Augmented Reality (AR) goggles, which can give engineers real-time instructions on how to fix a machine on a production line, for example.

Health

Support the delivery of healthcare provision and accessibility by enabling people greater access to online services, NHS appointment reminders, reminders to take medicines, make appointments etc.

Patients across the country are now becoming accustomed to relying on remote healthcare services such as NHS 111, virtual GP appointments, and ordering online deliveries of essential medical supplies.

5G will prove critical in providing the infrastructure required to deliver remote health services over the next decade. By design, 5G's ability to deliver real-time information (low latency), ultra-fast speeds (critical for high-definition images and video), increased capacity and heightened security are going to be fundamental in scaling the patient benefits of remote healthcare and keeping medical records secure and private. For instance, trials have shown that connecting ambulance crews to expert resources using 5G allows paramedics to work with doctors and conduct specialist procedures in real time whilst on the road.

Who will be affected by a lack of coverage and capacity?

In considering the merits of the proposal, it is important to consider the impact if the current network requirements for the operator in question were not met.

According to approximate figures produced by www.which.co.uk in an article updated in March 2024 and titled 'Best and Worst UK mobile networks', the approximate percentage of mobile device users in the UK market using the operator's network is as follows:

Vodafone Limited, (a Mobile Network Operator-MNO), and their Mobile Virtual

In the first instance, all correspondence should be directed to the agent.

Cornerstone Industry Site Specific Supplementary Information (England) V.9 – 22.03.2024

Registered Address:

Cornerstone Telecommunications, Infrastructure Limited,
Hive 2, 1530 Arlington Business Park, Theale, Berkshire, RG7 4SA.

Registered in England & Wales No. 08087551.

VAT No. GB142 8555 06



Cornerstone, Hive 2,
1530 Arlington Business Park,
Theale, Berkshire, RG7 4SA

Network Operators which use their network (MVNOs) (i.e., Asda Mobile, Lebara, Talk Mobile and Voxi), make up approximately 21% of mobile device user market in the UK.

It is therefore fair to assume that at a similar pro rata percentage of the mobile device users in the local area will be relying on the operators in question to provide an effective and long-term solution for up-to-date mobile network coverage and capacity at the earliest opportunity.

How people use mobile communications networks

In considering the proposal, it is also important to evaluate this proposal within a context of how people use and access mobile networks and industry trends, especially since those experienced during the peaks of the Covid-19 pandemic. We therefore refer to the 'Online Nation 2023 Report' which has been produced by Ofcom.

The report confirms the following:

UK adults spend almost 4 hours a day online, 3 hours of which are spent on smartphones. (UK young adults i.e., 18-24 year olds, spend approximately 5 hours online and UK adults aged 55+ spend approximately 3 hours online). 75% of the average time spent online per day by adults was via smart phones, i.e., for 2 hours 47 mins of the 3hours 41mins spent online/day. 25-34-year-olds spent the largest proportion of their online time on smartphones (87%). 89% of the time spent online via a smart phone was when using apps. 1 in 5 people use only a smartphone for online access compared with 1 in 10 in 2020.

With regards to the increased usage of smartphones only for online access, the report suggests the following:

"More people are using only a smartphone to go online. People were more likely in 2021 than in 2020 to only use a smartphone to go online (21% vs 11% in 2020). There could be many reasons, but this may be because people were spending more time at home in late 2020 and early 2021 than in late 2021, and therefore used a wider range of devices. It may also reflect the larger screen size and better-optimised app functions of many smartphones, making them easier and potentially more cost-effective to use as a sole device for accessing the internet."

Without the proposed site, the customer living, working and travelling in the area, and

In the first instance, all correspondence should be directed to the agent.

Cornerstone Industry Site Specific Supplementary Information (England) V.9 – 22.03.2024

Registered Address:

Cornerstone Telecommunications, Infrastructure Limited,
Hive 2, 1530 Arlington Business Park, Theale, Berkshire, RG7 4SA.
Registered in England & Wales No. 08087551.
VAT No. GB142 8555 06

 Cornerstone, Hive 2,
1530 Arlington Business Park,
Theale, Berkshire, RG7 4SA

those of the associated MVNOs, will not benefit from the most up to date, reliable mobile digital connectivity when using their smartphones for business, education and personal purposes.

Government Ambition and Legislative Reforms

It is important to consider this proposal in a wider context of National and Local Government ambition which clearly recognises the benefits that modern communications networks bring.

UK Wireless Infrastructure Strategy

The Strategy recognises the benefits that effective connectivity has brought to British households and business by boosting growth, productivity, and opportunity for all. Advanced wireless connectivity is heralded as the foundation on which to build industry, employment, skills and services for the future with 5G identified as being key to driving industry growth and improving public services and transport. Improving digital connectivity is also one of the government's Levelling Up Missions and aims for all places and communities across the UK to share in the benefits of good connectivity, enriching lives and driving local growth.

The document references the Prime Minister's 5 priorities for this government, i.e., to build a better, more secure, more prosperous future for the UK, including growing the economy, and creating better-paid jobs and opportunity right across the country, which this strategy is focused on delivering.

Chapter 5 of the Strategy deals specifically with 'Realising the benefits of 5G and advanced wireless connectivity' and states:

"5G and other forms of advanced wireless connectivity pave the way for new services and applications that can have a transformative effect on our public services, businesses and our local economies, delivering this government's priority of growing the economy and creating better paid jobs. Wireless connectivity can support mobile healthcare workers and connected vehicles, improve traffic flow through our cities and enable our factories to be more productive, supporting the fourth industrial revolution. Our evidence is clear that the most significant economic benefits from 5G will come from widespread adoption of advanced 5G by industrial sectors, including manufacturing and logistics, and by public services.

The government is determined that the UK should take full advantage of these opportunities and this proposal looks to progress these goals in the national and local interests

In the first instance, all correspondence should be directed to the agent.

Cornerstone Industry Site Specific Supplementary Information (England) V.9 – 22.03.2024

Registered Address:

Cornerstone Telecommunications, Infrastructure Limited,
Hive 2, 1530 Arlington Business Park, Theale, Berkshire, RG7 4SA.

Registered in England & Wales No. 08087551.

VAT No. GB142 8555 06

 Cornerstone, Hive 2,
1530 Arlington Business Park,
Theale, Berkshire, RG7 4SA

We are therefore providing the framework to ensure that people, businesses and public services across the UK are able to realise the full benefits of 5G and advanced wireless connectivity as soon as possible."

With regards to facilitating 5G at a local and regional level, Chapter 5 references the need for 'Local Leadership and Coordination' stating:

"Local leadership can help to identify and break down barriers to deployment at a local level by bringing together stakeholders across the public sector and building strong relationships with industry. The installation of telecoms infrastructure involves a number of different local government departments (such as planning, estates, highways) and their activities can be siloed and uncoordinated.

It is essential that, at a leadership level, local and regional authorities recognise the importance of wireless connectivity and identify decision-makers within the organisation who are empowered to facilitate private sector investment. By articulating the benefits of wireless infrastructure and connectivity and linking these to digital inclusion (and, in turn, tying these into local authorities' wider regeneration and growth or 'place' strategies) it can be viewed as an inward investment opportunity for places across the UK."

Connected Nations 2039

The updated report contains a chapter entitled 'Mobile, data and voice' stating:

"In an increasingly interconnected world, mobile services continue to play an integral role in our daily lives, from on-the-go calls and internet access to wireless connectivity for smart devices..."

The section goes on to confirm a list of 'Highlights' which includes the following:

"The availability of mobile 5G non-standalone continues to grow rapidly. The level of coverage provided outside of premises by at least one MNO increased to 85-93% in 2023, up from 67-78% in 2022 (across a range covering Very High and High Confidence levels)...

4G continues to provide the backbone of consumers' mobile experience. Coverage for data services from at least one MNO reached 93% of UK landmass and 4G continues to carry the majority of mobile data traffic (accounting for 81% of total data traffic).

Mobile traffic continues to grow, with overall traffic levels increasing by around 25% year on year, compared with a c.27% rise between 2021 and 2022. 5G

In the first instance, all correspondence should be directed to the agent.

Cornerstone Industry Site Specific Supplementary Information (England) V.9 – 22.03.2024

Registered Address:

Cornerstone Telecommunications, Infrastructure Limited,
Hive 2, 1530 Arlington Business Park, Theale, Berkshire, RG7 4SA.

Registered in England & Wales No. 08087551.

VAT No. GB142 8555 06

 Cornerstone, Hive 2,
1530 Arlington Business Park,
Theale, Berkshire, RG7 4SA

traffic has shown the highest growth from 63 PB in 2022 to 151 PB in 2023, a growth of around 140%.

MNOs have started switching off their 3G networks and have committed to switching off their 2G networks by 2033 at the latest. The number of customers using devices reliant on 2G or 3G connectivity has fallen sharply to 2.4 million and the level of data traffic carried on 3G networks is less than 3%, on average, across all MNOs.

We see continued evolution in non-consumer connectivity, marked by increased Internet of Things (IoT) connections from both MNOs and other players, alongside a 17% growth in MNOs' IoT traffic."

The report also confirms:

The availability of 5G services is growing rapidly:

The level of 5G coverage provided outside of premises by at least one mobile network operator (MNO) rose from 67-78% in 2022 (across a range covering Very High and High Confidence levels of availability) to 85-93% in 2023.

As of September 2023, there were more than 18,500 5G deployments in place across around 81,000 sites in the UK, up from around 12,000 5G deployments reported in 2022.

4G remains the main mobile network for most users, while the switch off of 3G networks has begun:

4G coverage provides the backbone of mobile services and has remained largely consistent with last year. The proportion of UK landmass covered by at least one MNO is now at 93% (+1 pp on 2022). 4G continues to carry the vast majority (81%) of mobile data traffic. Individual MNOs have continued to incrementally extend their networks, partly reflecting the work they are undertaking to deliver their Shared Rural Network obligations to achieve 88% coverage of the UK landmass by 2024. We are preparing to assess MNOs compliance with these obligations in 2024.

Meanwhile, the MNOs have started switching off their 3G networks. The number of customers using devices reliant on 2G or 3G connectivity has fallen sharply, from approximately 5.5 million reported last year to 2.4 million this year, of which just over half a million are residential customers

In the first instance, all correspondence should be directed to the agent.

Cornerstone Industry Site Specific Supplementary Information (England) V.9 – 22.03.2024

Registered Address:

Cornerstone Telecommunications, Infrastructure Limited,
Hive 2, 1530 Arlington Business Park, Theale, Berkshire, RG7 4SA.

Registered in England & Wales No. 08087551.

VAT No. GB142 8555 06

 Cornerstone, Hive 2,
1530 Arlington Business Park,
Theale, Berkshire, RG7 4SA

with a 3G device. Less than 3% of all mobile data traffic is now carried on 3G networks, with 3G data traffic having decreased by an average of 44% year on year.

Climate change and the transition to net zero are important context for the telecoms sector:

The telecoms industry facilitates the use of technology to deliver net zero solutions and enable significant emission reductions in other sectors.

Network operators are continuing to progress plans for the rollout of full-fibre networks:

The availability of full-fibre and gigabit-capable networks is expected to continue to increase over the next few years. A range of network operators plan to continue deploying new infrastructure, using varying business models.

Emergency Calls

Long-standing arrangements mean that, when making an emergency call, a mobile handset will be able to use any network that is available, even if it is not the network the user subscribes to.

Calls can currently be made over 2G, 3G and 4G (via VoLTE) and we predict that emergency calls are possible inside almost all UK premises and across 96% of the UK's landmass. On roads, emergency calls should be possible inside vehicles for around 99% of motorways and A roads, and 97% of B roads outdoors.

Business Connectivity and Internet of Things (IoT)

Mobile services extend beyond serving the general public; they play a pivotal role in supporting business connectivity and facilitating device-to-device communication. In today's digital landscape, many businesses rely on broadband services for the actual delivery of their products and services. Consequently, both mobile and non-mobile service providers are leveraging the capabilities of 5G technology (in addition to other technologies) to provide bespoke connectivity solutions across a wide array of sectors, including manufacturing, logistics, agriculture, automotive, energy, media and entertainment, and healthcare.

In the first instance, all correspondence should be directed to the agent.

Cornerstone Industry Site Specific Supplementary Information (England) V.9 – 22.03.2024

Registered Address:

Cornerstone Telecommunications, Infrastructure Limited,
Hive 2, 1530 Arlington Business Park, Theale, Berkshire, RG7 4SA.

Registered in England & Wales No. 08087551.

VAT No. GB142 8555 06

 Cornerstone, Hive 2,
1530 Arlington Business Park,
Theale, Berkshire, RG7 4SA

UK Digital Strategy Policy Paper

The UK Government's Policy Paper was updated on 04 October 2022, within which 'Section 1 Digital Foundations' reiterates that digital infrastructure plays a vital role in the daily lives of modern society and is the foundation of a thriving digital economy. The Strategy confirms that every part of the UK needs world-class, secure digital infrastructure that enables people to access the connectivity and services they need, where they live, work or travel, and clearly states the ambition to supply the majority of the UK's population with access to 5G by 2027. The Strategy also highlights the fact that enhancing digital connectivity is 'Mission 4' of the Government's Levelling Up White Paper¹¹.

The Town and Country Planning (General Permitted Proposal) (England) (Amendment) Order 2022

Amended legislation was introduced on 4th April 2022 which saw a relaxing of planning laws to facilitate Government ambition for all to have access to effective and up to date mobile communications services in recognition for the benefits that modern communications networks bring.

The 'Explanatory Memorandum' that accompanied this amendment confirms that:

"Permitted proposal rights have an important role to play in the planning system. They provide a more streamlined planning process with greater planning certainty, while at the same time allowing the local consideration of key planning matters through a light-touch prior approval process."

Policy Background, what is being done and why? Paragraph 7.1

"It is essential that the planning system continues to effectively support the deployment of new mobile network infrastructure. The changes will provide Code Operators with flexibility to upgrade existing sites in England for 5G delivery, enhance coverage and meet growing demands for network capacity. They will also reduce the time, cost and uncertainty involved in upgrading mobile network infrastructure and encourage the use of existing infrastructure and promote site sharing to reduce the impacts of new deployment."

Policy Background, what is being done and why? Paragraph 7.3

Article 3(2)(a) of the Order revises height limits for the deployment of new ground-based masts through permitted proposal rights. These changes permit the installation of new ground-based masts of up to 30 metres in height on unprotected land, and up to 25 metres on Article 2(3) land. In both cases Code Operators would need prior approval from the local planning authority. These changes will reduce the number of new ground-based masts needed and will particularly support deployment of the Shared Rural Network, a programme to

In the first instance, all correspondence should be directed to the agent.

Cornerstone Industry Site Specific Supplementary Information (England) V.9 – 22.03.2024

Registered Address:

Cornerstone Telecommunications, Infrastructure Limited,
Hive 2, 1530 Arlington Business Park, Theale, Berkshire, RG7 4SA.

Registered in England & Wales No. 08087551.

VAT No. GB142 8555 06

 Cornerstone, Hive 2,
1530 Arlington Business Park,
Theale, Berkshire, RG7 4SA

increase mobile network coverage throughout the UK.

New ground-based masts, Paragraph 7.16

Future Telecoms Infrastructure Review (FITR)

In 2018, the Department for Digital, Culture, Media and Sport published the FITR, outlining the Government's intent on being the best place to start and grow digital business with the aim of providing the majority of the population with 5G coverage by 2027. The FITR made it clear that 5G networks will deliver faster and better mobile broadband data services to consumers and businesses and will enable innovative new services for industry sectors, including manufacturing, transport, immersive technologies and health care.

The Electronic Communications Code 2017

The benefits modern communications systems bring is evident in the publication of this document which has made it easier for network operators to install and maintain apparatus, such as phone masts, exchanges and cabinets, on public and private land with Part 4, Paragraph 20, providing a mechanism for the courts to impose terms of occupation on a landowner and the Operator or infrastructure provider. Further amendments to this Code are imminent, to help streamline the acquisition process and clarify relationships between infrastructure providers and site owners.

Code of Practice for Wireless Network Proposal in England

The Code of Best Practice 2016 has now been replaced with this document which provides guidance to Code Operators (referred to as 'operators' throughout the Code of Practice), including the Mobile Network Operators and wireless infrastructure providers, their agents and contractors, local planning authorities, and all other relevant stakeholders in England on how to carry out their roles and responsibilities when installing wireless network infrastructure. It is also a useful tool for other interested stakeholders such as community groups, amenity bodies and individuals with an interest in mobile connectivity.

The aim of the Code of Practice is to support the government's objective of delivering high quality wireless infrastructure whilst balancing these needs with environmental considerations. It also has an important role in making sure that appropriate engagement takes place with local communities and other interested parties.

It is also important to note that, although led by the Department for Digital, Culture, Media and Sport (DCMS), this Code of Practice has been developed in collaboration with representatives of the mobile network industry, other government departments and public bodies, local planning authorities, and protected landscapes.

In the first instance, all correspondence should be directed to the agent.

Cornerstone Industry Site Specific Supplementary Information (England) V.9 – 22.03.2024

Registered Address:

Cornerstone Telecommunications, Infrastructure Limited,
Hive 2, 1530 Arlington Business Park, Theale, Berkshire, RG7 4SA.

Registered in England & Wales No. 08087551.

VAT No. GB142 8555 06

 **Cornerstone, Hive 2,**
1530 Arlington Business Park,
Theale, Berkshire, RG7 4SA

The document outlines the Legal and Policy frameworks within which the document has been produced and reiterates the following:

“Digital connectivity is vital to enable people to stay connected and businesses to grow. Fast, reliable digital connectivity can deliver economic, social and well-being benefits for the whole of the UK.

As the demand for mobile data in the United Kingdom is increasing rapidly, it is important that everyone has access to dependable and consistent mobile coverage where they live, work and travel.”

Paragraphs 8 and 9

It is also important to note that the Code states that:

“Section 10 of the NPPF sets out the planning policies for communications proposal in England, and states that advanced, high quality and reliable communications infrastructure is essential for economic growth and social well-being. The NPPF also sets out that planning policies and decisions should support the expansion of electronic communications networks, including next generation mobile technologies (such as 5G).

Other sections of the NPPF set out how these policies should be balanced with other considerations, including conserving and enhancing the natural environment and historic environment.”

Paragraph 15

With regards to how wireless networks function, and with specific reference to 5G, the Code states that:

“Wireless technology continues to evolve rapidly, and mobile devices are now capable of much more. Second generation (2G) technology gave us voice calls and text messages, 3G led to the launch of smartphones, and 4G, which enabled faster browsing, allowed us to do things like watching videos on the move. 5G, the latest generation of wireless technology, is much faster than previous generations of wireless technology and can offer greater capacity and lower latency, allowing thousands of devices in a small area to be connected at the same time. 5G networks, and future mobile generations, will be vital for a range of Internet of Things uses (IoT) and Smart City applications.”

Paragraph 17

The Code also outlines its 'Principles and Commitment' as follows:

Operators should therefore develop their networks and install wireless infrastructure according to the following principles and commitments:

In the first instance, all correspondence should be directed to the agent.

Cornerstone Industry Site Specific Supplementary Information (England) V.9 – 22.03.2024

Registered Address:

Cornerstone Telecommunications, Infrastructure Limited,
Hive 2, 1530 Arlington Business Park, Theale, Berkshire, RG7 4SA.

Registered in England & Wales No. 08087551.

VAT No. GB142 8555 06



Cornerstone, Hive 2,
1530 Arlington Business Park,
Theale, Berkshire, RG7 4SA

"Site sharing and use of existing infrastructure: make use of existing structures, sites and masts wherever possible to reduce the need for new proposal. The NPPF states that, when installing mobile infrastructure, the number of masts and sites should be kept to a minimum consistent with the needs of consumers, the efficient operation of the network and providing reasonable capacity for future expansion.

Consultation with local planning authorities, local communities and other stakeholders: participate in dialogue with local planning authorities, along with other relevant stakeholders such as the highways authorities, Area of Outstanding Natural Beauty bodies, Historic England, and Natural England, including pre-application discussions, where appropriate. Maintain clear procedures, and high-quality communication and consultation with local communities and other interested parties. Operators should agree community engagement with local planning authorities and share information as appropriate (see pre-application consultation with local communities below). Standardised and high-quality approach to planning applications, and the notification procedure: provide standardised supporting documentation for planning applications (where appropriate) within the context of national and local requirements. Ensure planning submissions are of high-quality and provide the necessary evidence to support the application (as per the NPPF).

Prompt responses to enquiries: respond to complaints and enquiries within a timely manner (see Review and Enquiries section below).

Siting and Design: wireless infrastructure should be deployed in accordance with the guidance set out within this Code of Practice. Where appropriate, equipment should comply with the principles set out in the NPPF and consider any local planning policies, including any local and national design codes. When located in protected landscapes and other designated land, the sensitive nature of these areas must be considered.

Removal of redundant equipment and site restoration: ensure that when infrastructure is upgraded, any equipment that is made redundant by the upgrade, such as brackets, is removed to benefit the local environment. Where a whole site is no longer in use, the site should be restored to its original state. Compliance with guidance laid out in the International Commission on Non-Ionizing Radiation Protection (ICNIRP) public exposure levels guidance: as required by spectrum licences, comply with international guidelines for limiting exposure to electromagnetic fields (EMF)-including, as set out in the NPPF, providing a statement that self-certifies that ICNIRP guidelines will be met with all applications (see Annex C)."

Paragraph 18

Equally importantly, the new Code outlines the role of the Local Planning Authority stating:

In the first instance, all correspondence should be directed to the agent.

Cornerstone Industry Site Specific Supplementary Information (England) V.9 – 22.03.2024

Registered Address:

Cornerstone Telecommunications, Infrastructure Limited,
Hive 2, 1530 Arlington Business Park, Theale, Berkshire, RG7 4SA.

Registered in England & Wales No. 08087551.

VAT No. GB142 8555 06

 Cornerstone, Hive 2,
1530 Arlington Business Park,
Theale, Berkshire, RG7 4SA

Local planning authorities should support the deployment of digital infrastructure by:

Incentivising connectivity: support the expansion of telecommunications networks, and take a 'joined-up' approach to the wireless infrastructure planning process, including ensuring that Local Plans effectively support the deployment of digital infrastructure.

Facilitating sites by engaging with operators when new sites have been proposed and discuss site requirements.

Engagement with operators by responding positively to requests for engagement and make decisions in line with national policy and Local Plans. For planning applications, find solutions to issues and ensure timely decisions are made.

Information and communication: ensure that members of the public can access information about any proposal proposals within their local area. Send communications promptly to an appropriate operator contact (or their representatives)."

Paragraph 19

Summary

The above demonstrates the Government's recognition of the importance of reliable connectivity now and in the future in which decision makers must determine telecommunications applications, particularly those such as in this case where coverage and capacity needs to be increased positively and support such proposals where appropriate for the good of the local population and those in transit and visiting the area

Planning Policy

The statutory development plan for the area is comprised of the NPPF, December 2024 and the Wokingham Borough Local Development Framework, Adopted Core Strategy Development Plan Document, January 2010.

National Planning Policy Framework (NPPF), December 2024

The NPPF outlines the Government's strategies for economic, environmental and social planning policy in England providing a set of objectives that have been designed to foster the delivery of sustainable proposal, not to hinder or prevent proposal. Local planning authorities are directed to approach planning decisions positively and to attach significant weight to the benefits of economic growth. The NPPF also states that where a proposal plan is absent, silent or out of date then permission should be granted unless the adverse impact of doing so would significantly outweigh the benefits when assessed against the NPPF.

In the first instance, all correspondence should be directed to the agent.

Cornerstone Industry Site Specific Supplementary Information (England) V.9 – 22.03.2024

Registered Address:

Cornerstone Telecommunications, Infrastructure Limited,
Hive 2, 1530 Arlington Business Park, Theale, Berkshire, RG7 4SA.

Registered in England & Wales No. 08087551.

VAT No. GB142 8555 06



Cornerstone, Hive 2,
1530 Arlington Business Park,
Theale, Berkshire, RG7 4SA

Section 10 of the NPPF is entitled “Supporting High Quality Communications” Paragraph 119 confirms that *“Advanced, high quality and reliable communications infrastructure is essential for economic growth and social well-being. Planning policies and decisions should support the expansion of electronic communications networks, including next generation mobile technology (such as 5G) and full fibre broadband connections. “*

The proposed development aims to upgrade an existing telecommunications site to the benefit of the local community and visitors to and through the area.

Paragraph 120 states *“Use of existing masts, buildings and other structures for new electronic communications capability (including wireless) should be encouraged.”*

The proposed development cannot be installed on the existing telecommunications mast, as it is not structurally capable of supporting the required antennas and transmission dish. Accordingly, the next best solution is to provide a new mast and remove the existing mast, whilst remaining within the established compound, thereby re-using the site.

Under paragraph 123 *“Local planning authorities must determine applications on planning grounds only. They should not seek to prevent competition between different operators, question the need for an electronic communications system, or set health safeguards different from the International Commission guidelines for public exposure.”*

The proposed development duly considers all potential impacts, whilst at the same time complying with ICNIRP requirements. An ICNIRP Certificate is submitted with the application to confirm this.

Paragraph 129 continues *“Planning policies and decisions should support development that makes efficient use of land, taking into account:*

- a) the identified need for different types of housing and other forms of development, and the availability of land suitable for accommodating it;*
- b) local market conditions and viability;*
- c) the availability and capacity of infrastructure and services – both existing and proposed – as well as their potential for further improvement and the scope to promote sustainable travel modes that limit future car use;*

In the first instance, all correspondence should be directed to the agent.

Cornerstone Industry Site Specific Supplementary Information (England) V.9 – 22.03.2024

Registered Address:

Cornerstone Telecommunications, Infrastructure Limited,
Hive 2, 1530 Arlington Business Park, Theale, Berkshire, RG7 4SA.

Registered in England & Wales No. 08087551.

VAT No. GB142 8555 06

 Cornerstone, Hive 2,
1530 Arlington Business Park,
Theale, Berkshire, RG7 4SA

d) the desirability of maintaining an area's prevailing character and setting (including residential gardens), or of promoting regeneration and change; and

e) the importance of securing well-designed, attractive and healthy places."

Importantly, the re-use of the site and intensification of development thereon ensures the efficient use of land, by upgrading the equipment and enhancing the telecommunications services provided in the local area, whilst maintaining the area's prevailing character and setting.

The mast has been specifically designed for the site in question, taking into account the height and extent of nearby trees and structures and views into and out of the site. None of the nearby trees will need to be lopped, topped or felled as a result of the proposal and those trees nearby which are covered by TPO's will remain unaffected also.

No increase in height is proposed and the proposed mast takes into account the need to provide enhanced telecommunications services which can be done by providing new antennas in a revised format spread further apart and a new 0.3m transmission dish. Radio planners have identified this format and arrangement as the most successful solution, with the minimum impact on the character and appearance of the area and the environment more generally as possible.

Section 10 goes on to confirm that developers must provide evidence in relation to their site selection process that confirms that every effort has been made to identify the best available site option. It also places an emphasis on the fact that LPAs must determine applications for communications infrastructure on planning grounds alone.

In this instance re-use of the existing site avoided the need to find a suitable alternative, as this is the optimum solution, as encouraged by the NPPF. As the application is for prior approval only siting and appearance can be considered by the LPA in this instance.

Wokingham Borough Local Development Framework, Adopted Core Strategy Development Plan Document, January 2010.

CP1 Sustainable Development

Planning permission will be granted for development proposals that:

- 1) Maintain or enhance the high quality of the environment;*
- 2) Minimise the emission of pollutants into the wider environment;*
- 3) Limit any adverse effects on water quality (including ground water);*
- 4) Ensure the provision of adequate drainage;*

In the first instance, all correspondence should be directed to the agent.

Cornerstone Industry Site Specific Supplementary Information (England) V.9 – 22.03.2024

Registered Address:

Cornerstone Telecommunications, Infrastructure Limited,
Hive 2, 1530 Arlington Business Park, Theale, Berkshire, RG7 4SA.

Registered in England & Wales No. 08087551.

VAT No. GB142 8555 06



Cornerstone, Hive 2,
1530 Arlington Business Park,
Theale, Berkshire, RG7 4SA

- 5) Minimise the consumption and use of resources and provide for recycling;
- 6) Incorporate facilities for recycling of water and waste to help reduce per capita water consumption;
- 7) Avoid areas of best and most versatile agricultural land;
- 8) Avoid areas where pollution (including noise) may impact upon the amenity of future occupiers;
- 9) Avoid increasing (and where possible reduce) risks of or from all forms of flooding (including from groundwater);
- 10) Provide attractive, functional, accessible, safe, secure and adaptable schemes;
- 11) Demonstrate how they support opportunities for reducing the need to travel, particularly by private car in line with CP6; and
- 12) Contribute towards the goal of reaching zero-carbon development as soon as possible by:
 - a) Including appropriate on-site renewable energy features; and
 - b) Minimising energy and water consumption by measures including the use of appropriate layout and orientation, building form, design and construction, and design to take account of microclimate so as to minimise carbon dioxide emissions through giving careful consideration to how all aspects of development form.

The proposed development uses an existing telecommunications site which has been in situ for a considerable length of time. The location of the site to the rear of the pub car park, set well back from the road frontage and close to high level trees provides a backdrop and context for the proposal without causing harm to the local environment. As such the quality of the environment will be maintained. There will be no emission of pollutants into the wider environment. Similarly water quality and drainage will not be unduly affected. Recycling and waste are not relevant to this form of development. The site does not lie on agricultural land. The minor extension to the existing concrete pad will not unduly affect flood risk. The compound itself will remain as existing and therefore safety and security will remain unaffected.

The provision of improved telecommunications services in the area has the potential to reduce the need to travel. Other aspects of the policy are not entirely relevant to this case. The use of an existing telecommunications site represents the most sustainable approach available to improved telecommunications services in the area and accordingly the aims and objectives of Policy CP1 are adhered to.

CP3 - General Principles for development

Planning permission will be granted for proposals that:

- a) *Are of an appropriate scale of activity, mass, layout, built form, height, materials and character to the area together with a high quality of design without detriment to the amenities of adjoining land users including open spaces or occupiers and their*

In the first instance, all correspondence should be directed to the agent.

Cornerstone Industry Site Specific Supplementary Information (England) V.9 – 22.03.2024

Registered Address:

Cornerstone Telecommunications, Infrastructure Limited,
Hive 2, 1530 Arlington Business Park, Theale, Berkshire, RG7 4SA.

Registered in England & Wales No. 08087551.

VAT No. GB142 8555 06

 Cornerstone, Hive 2,
1530 Arlington Business Park,
Theale, Berkshire, RG7 4SA

quality of life;

b) Provide a functional, accessible, safe, secure and adaptable scheme;

c) Have no detrimental impact upon important ecological, heritage, landscape (including river valleys) or geological features or water courses.

d) Maintain or enhance the ability of the site to support fauna and flora including protected species;

e) Use the full potential of the site and contribute to the support for suitable complementary facilities and uses;

f) Contribute to a sense of place in the buildings and spaces themselves and in the way they integrate with their surroundings (especially existing dwellings) including the use of appropriate landscaping;

g) Provide for a framework of open space in secure community use achieving at least 4.65 ha/1,000 population provision together with recreational/sporting facilities in addition to private amenity space;

h) Contribute towards the provision of an appropriate sustainable network of community facilities;

i) Do not lead to a net loss of dwellings and other residential accommodation or land; and

j) Do not lead to a loss of community or recreational facilities/land or infrastructure unless suitable alternative provision is available.

Development proposals will be required to demonstrate how they have responded to the above criteria through the submission of Design and Access Statements, clear and informative plans, elevations and street scenes and where required Masterplans, Development Briefs, Concept Statements and Design Codes.

The proposed development has been specifically designed for the site in question, taking into account the site specific characteristics to develop a design that will be easily assimilated into its context, without harming the amenities of adjacent land users. The proposed replacement mast has been designed to improve telecommunications services in the locality without causing harm to the ecological, heritage, landscape or geological features of the area in a manner which is functional, accessible to authorised personnel only, safe, secure and adaptable.

The existing compound will remain the same, with only a small extension to the existing concrete pad proposed to support the replacement mast. The new mast will help maximise use of the site without affecting the sense of place in the area, due to the well screened back land location of the site to the rear of the pub car park. Close to mature trees. There will be no loss of residential, community or recreational facilities or land, but an improvement in telecommunications infrastructure will be achieved to the benefit of the local community and people travelling through the local area and along the M4.

In the first instance, all correspondence should be directed to the agent.

Cornerstone Industry Site Specific Supplementary Information (England) V.9 – 22.03.2024

Registered Address:

Cornerstone Telecommunications, Infrastructure Limited,
Hive 2, 1530 Arlington Business Park, Theale, Berkshire, RG7 4SA.

Registered in England & Wales No. 08087551.

VAT No. GB142 8555 06

 Cornerstone, Hive 2,
1530 Arlington Business Park,
Theale, Berkshire, RG7 4SA

In this instance a Design and Access statement has not been prepared, as the supplementary information template covers the relevant issues. The application is supported by clear and informative plans and other documentation relevant to telecommunications infrastructure.

CP4 - Infrastructure Requirements

Planning permission will not be granted unless appropriate arrangements for the improvement or provision of infrastructure, services, community and other facilities required for the development taking account of the cumulative impact of schemes are agreed.

Arrangements for provision or improvement to the required standard will be secured by planning obligations or condition if appropriate.

The proposed development seeks to improve telecommunications services in the area by the provision of a new and upgraded mast to replace the existing mast. The application seeks prior approval for the installation of a new mast and the removal of all redundant equipment in terms of its siting and appearance. As such planning conditions are not appropriate in this instance.

CP8 Thames Basin Heaths Special Protection Area

Development which alone or in combination is likely to have a significant effect on the Thames Basin Heaths Special Protection Area will be required to demonstrate that adequate measures to avoid and mitigate any potential adverse effects are delivered.

No undue or significant effects on the Thames Basin Heaths Special Protection Area will arise as a result of the proposed development. The proposal utilises an existing telecommunications site on well screened site, to the rear of a pub car park, which is not generally visible from outlying areas. No additional land is required. The proposal is contained within the boundaries of the existing site compound.

CP9 Scale and location of development proposals

The scale of development proposals in Wokingham borough must reflect the existing or proposed levels of facilities and services at or in the location, together with their accessibility. Development proposals (in addition to the Strategic Development Locations in policies CP18-21) within development limits will be acceptable in:

- 1) The major development locations of Earley, Green Park, Shinfield (North of M4), Twyford, Winnersh, Wokingham and Woodley;*
- 2) The modest development locations of Arborfield Garrison, Pinewood (Crowthorne), Finchampstead North, Ruscombe, Shinfield, Spencers Wood, Three Mile Cross and*

In the first instance, all correspondence should be directed to the agent.

Cornerstone Industry Site Specific Supplementary Information (England) V.9 – 22.03.2024

Registered Address:

Cornerstone Telecommunications, Infrastructure Limited,
Hive 2, 1530 Arlington Business Park, Theale, Berkshire, RG7 4SA.

Registered in England & Wales No. 08087551.

VAT No. GB142 8555 06

 Cornerstone, Hive 2,
1530 Arlington Business Park,
Theale, Berkshire, RG7 4SA

Wargrave.

3) The limited development locations of Arborfield Cross, Barkham Hill, Charvil, Finchampstead, Hurst, Riseley, Sindlesham, Sonning and Swallowfield.

4) The boundary of the Science Park proposed under policy CP16 as defined in the Managing Development Delivery DPD.

Affordable housing on rural exception sites will be permitted adjoining the Development Limits of Modest or Limited Development Locations, if a need is demonstrated for residents, workers or other people with family connections within the Parish Council's area.

The proposed development is small in scale and confined within the boundaries of an existing telecommunications compound. No additional land is required in this instance and the scale and location of the development in an area which is well screened from the main road is entirely suitable in this context. The existing mast is also not visible from the M4 motorway. Whilst the headframe of the mast is of increased dimensions, its height will remain the same. Accordingly it is anticipated that the mast will still be well screened by the nearby mature trees and will not appear incongruous in this setting.

CP11 Proposals outside Development Limits (including countryside)

In order to protect the separate identity of settlements and maintain the quality of the environment, proposals outside of development limits will not normally be permitted except where:

- 1) It contributes to diverse and sustainable rural enterprises within the borough, or in the case of other countryside based enterprises and activities, it contributes and/or promotes recreation in, and enjoyment of, the countryside; and*
- 2) It does not lead to excessive encroachment or expansion of development away from the original buildings; and*
- 3) It is contained within suitably located buildings which are appropriate for conversion, or in the case of replacement buildings would bring about environmental improvement; or*
- 4) In the case of residential extensions, does not result in inappropriate increases in the scale, form or footprint of the original building;*
- 5) In the case of replacement dwellings the proposal must:*
 - i) Bring about environmental improvements;*
 - ii) or Not result in inappropriate increases in the scale, form or footprint of the original building.*
- 6) Essential community facilities cannot be accommodated within development limits or through the re-use/replacement of an existing building;*
- 7) Affordable housing on rural*

In the first instance, all correspondence should be directed to the agent.

Cornerstone Industry Site Specific Supplementary Information (England) V.9 – 22.03.2024

Registered Address:

Cornerstone Telecommunications, Infrastructure Limited,
Hive 2, 1530 Arlington Business Park, Theale, Berkshire, RG7 4SA.

Registered in England & Wales No. 08087551.

VAT No. GB142 8555 06

 Cornerstone, Hive 2,
1530 Arlington Business Park,
Theale, Berkshire, RG7 4SA

The provision of fast, up to date telecommunications services, with improvements in coverage and capacity will benefit not only the local community, but also visitors to and through the area. The use of an existing telecommunications site represents the most sustainable approach, as promoted by the NPPF, avoiding encroachment into the countryside and expansion of development away from existing buildings. The siting of the replacement mast within an existing compound, to the rear of the pub car park, within the context of mature trees and vegetation will be entirely appropriate in this setting. Re-use and replacement of an existing structure is proposed which entirely accords with the aims and objectives of the above policy.

CONCLUSION

There is a requirement for Vodafone Ltd to provide advanced telecommunications technologies to this area of south Reading known as Shinfield. Network planners have identified a need for an upgraded installation and the proposed development will address this identified need and continued customer demands.

National planning policy is to facilitate the growth of new and existing telecommunications systems, and operators have obligations to meet customer demands for improved quality of service. This application explains the technical need for the installation to provide improved customer service.

In terms of siting and design, it is considered that the proposal responds well to the character and appearance of the local environment and will not have an unacceptable adverse impact on the application site or the surrounding area. The design is of a high standard, and will not detract significantly from the existing visual and environmental character of the area. The benefits to businesses, residents and visitors to the area, by the introduction of 5G technologies to the area far outweigh any potential perceived negative impacts. In all these circumstances it is concluded that there no policy or other objections that would warrant the refusal of planning permission and accordingly permission should be granted for the proposed development

We trust that the above and enclosed information is to your satisfaction and would be happy to expand upon any aspect of this proposal if required.

In the first instance, all correspondence should be directed to the agent.

Cornerstone Industry Site Specific Supplementary Information (England) V.9 – 22.03.2024

Registered Address:

Cornerstone Telecommunications, Infrastructure Limited,
Hive 2, 1530 Arlington Business Park, Theale, Berkshire, RG7 4SA.

Registered in England & Wales No. 08087551.

VAT No. GB142 8555 06



Cornerstone, Hive 2,
1530 Arlington Business Park,
Theale, Berkshire, RG7 4SA

Confirmation that submitted drawings have been checked for accuracy

Name: (Agent)	<u>Susan Griffiths</u>	Telephone:	
Company:	<u>Beacon Communications</u>		
Company	10 Sovereign Park	Email Address:	
Address:	Cleveland Way		
	Hemel Hempstead		
	Hertfordshire		
	HP2 7DA		
Signed:		Date:	<u>19th August 2025</u>
Position:	<u>National Head of Planning</u>	(on behalf of Cornerstone)	

In the first instance, all correspondence should be directed to the agent.

Cornerstone Industry Site Specific Supplementary Information (England) V.9 – 22.03.2024

Registered Address:

Cornerstone Telecommunications, Infrastructure Limited,
Hive 2, 1530 Arlington Business Park, Theale, Berkshire, RG7 4SA.

Registered in England & Wales No. 08087551.

VAT No. GB142 8555 06

 Cornerstone, Hive 2,
1530 Arlington Business Park,
Theale, Berkshire, RG7 4SA