

SUPPLEMENTARY INFORMATION

1. Site Details

Site Name:	Wood Street	Site Address:	Streetworks on adopted grass verge off Wood Street, Barnsley, South Yorkshire, S70 1L
NGR:	E: 434462 N: 405834		
Site Ref Number:	CTIL_116622_TEF_46277_NA	Site Type: ¹	Macro

2. Pre Application Check List

Site Selection (for New Sites only)

(would not generally apply to upgrades/alterations to existing sites)

Was an LPA mast register used to check for suitable sites by the operator or the LPA?		No
If no explain why: Application is an upgrade to an existing site.		
Was the industry site database checked for suitable sites by the operator:		No
If no explain why: Application is an upgrade to an existing site.		

Annual Area Wide consultation with local planning authority

Date of information submission to local planning authority	06/10/2014 (Letter), 13/01/2015 (Meeting)
Name of Contact	Mr. Steve Kirkham
Summary of any issues raised:	Eamon Hansberry from CTIL presented the roll-out proposals to Steve Kirkham on January 13th, detailing the level of coverage improvements to be provided and the upgrades required. The planning officer invited the submission of the planning applications to allow the proposals be formally assessed and determined.

Pre-application consultation with local planning authority

Date of written offer of pre-application consultation:	11.11.2014
Was there pre-application contact:	Yes
Date of pre-application contact:	23.12.2014
Name of contact:	Keith Pell

¹ Macro or Micro

Summary of outcome/Main issues raised:

The written response received from the LPA states that;
'The Council's Highways Section has been consulted on the proposal and has commented that the proposed mast upgrade is within the highway verge at an existing mast location and as such will have no significant adverse impact upon the highway network'.

Ten Commitments Consultation

Rating of Site under Traffic Light Model:	Red	Amber	Green
Outline Consultation carried out:			
Consultation with local Ward Councillors' M. Dyson, D. Birkshaw, M. Bruff MP D. Jarvis.			
Pre-application consultation letters were sent to these parties on the 11.11.2014.			
Summary of outcome/Main issues raised:			
Letter received from Councillor M. Bruff			
"Thank you for you letter informing me of the above. I am pleased to see you have contacted local groups and I cannot think of any you might not have included."			

School/College

Location of site in relation to school/college:
Barnsley Christion School, Blucher St, Barnsley, South Yorkshire, S70 1AP.
Little Jo's Day Nursery, 35 Doncaster Road, Barnsley, South Yorkshire, S70 1TH.
Outline of consultation carried out with school/college:
Pre-consultation letters sent to the Managers for the above schools on 10.11.2014.
Summary of outcome/Main issues raised:
No specific comments received to date.

Civil Aviation Authority/Secretary of State for Defence/Aerodrome Operator consultation (only required for an application for prior approval)

Will the structure be within 3km of an aerodrome or airfield?		No
Has the Civil Aviation Authority/Secretary of State for Defence/Aerodrome Operator been notified?		N/A
Details of response:		
N/A		

Developer's Notice

Copy of Developer's Notice enclosed?		YES
Date served:	16/01/14	

3. Proposed Development

The proposed site:

Background

Telefonica Limited has entered into an agreement with Vodafone Limited pursuant to which the two companies plan to jointly operate and manage a single network grid across the UK. These arrangements will be overseen by Cornerstone Telecommunications Infrastructure Limited (CTIL) which is a joint venture company owned by Telefonica UK Limited and Vodafone Limited. This agreement allows both organisations to:

- pool their basic network infrastructure, while running two, independent, nationwide networks
- maximise opportunities to consolidate the number of base stations
- significantly reduce the environmental impact of network development

This application is submitted for and on behalf of CTIL and Telefonica Limited. As part of Telefonica's continued network improvement programme, there is a specific requirement for a radio base station upgrade at this location to provide new 2G and 4G coverage and enhanced, upgraded and integrated 3G coverage on the part of two operators. The site will be capable of accommodating new, more advanced technologies when they come on stream in the future.

Site

The site is located on the adopted grass verge off Wood Street and close to the intersection with New Street, south of Barnsley Town Centre. The area to the south of Wood Street is predominantly residential in nature and the area to the north is comprised of a mix of uses including industrial warehouses, a health centre, shopping centre, other retail uses and residential uses.

The precise site location is on a strip of adopted grass verge off Wood Street close to the junction with New Street. Immediately to the north of the site location is an abandoned warehouse and possibly a future development site, immediately to the south is Wood Street followed by residential dwellings of this wider residential area. Immediately to the west and past the Wood Street/New Street junction is Princess Street which is bound on both sides by rows of terrace housing. To the north west is a health centre and finally to the east is an area that contains warehouses which is followed further east by a residential area.

The site location is set against a brick and concrete wall with barbed wire braced to the top of it. The wall provides screening to the lowest 2m section of the column and the cabinets when viewed from the north. Views of the radio base station from all other aspects are more open, however the existing and proposed column would be viewed in the context of already existing vertical elements, such as telegraph poles, lighting columns and street signage. Due to the topography of the site location, when viewed from the town centre the proposal will be set against a backdrop of Wood Street which rises to the south east.

Wood Street itself travels in an east and west direction of the site location. Only the northern side of the road is abutted by a deep grass verge where the site is located. The grass verge is approximately 55m in length and terminates at the entrance to the warehouse to the east. The southern side of Wood Street is abutted by a public footpath aligned with fencing of the adjacent Fleming Place residential development garden areas.

The topography of the site rises in a southeast direction, therefore the sloping landscape in conjunction with the built environment will provide much screening to the proposed column from the wider area, particularly from the east and Barnsley Town Centre. Indeed the replacement proposal can be relatively easily absorbed here due to the nature of the topography, existing vertical infrastructure and commercial/industrial uses adjoining the site.

The streetscene is made up of a number of linear items of urban street furniture, most notably existing lighting columns, totem poles, road signage, and palisade fencing.

Enclose map showing the cell centre and adjoining cells:

This is an upgrade to the existing site to fundamentally enable the operators to jointly operate and manage a single network grid across the UK, to provide new 2G and 4G coverage and enhanced, upgraded and integrated 3G coverage on the part of two operators, in accordance with the CTIL joint venture arrangements.

Type of Structure: 15m Streetworks Elara

Description

This proposal is for the replacement of an 13.8m existing column supporting 6 no. antennas, 2 no. existing equipment cabinets and 1 no. meter cabinet with a new 15m column supporting 3 no. antennas within a shroud at the top of the column, 2 no. replacement equipment cabinets, 1 no. replacement meter cabinet and 1 additional equipment cabinet, and ancillary works thereto.

The current telecommunications site is comprised of an 13.8m monopole, 6 no. antennas in a GRP shroud; 2 no. existing equipment cabinets and 1 no. meter cabinet.

The proposed new column is 1.2m taller than the existing column; it will be finished in a grey colour to match the column it is replacing to maintain the existing site appearance as much as possible.

The antennas within the new structure will be concealed within a cylindrical shroud at the top of the column measuring some 540mm in diameter. Underneath the shroud the column width is reduced to some 324mm throughout the majority of the rest of the column, apart from the lowest 2m of the column which will be 350mm in width.

The 3 no. new cabinets will replace 2 no. existing cabinets (dimensions below) and will be green in colour to match the existing ones and to blend in with their surroundings.

Overall Height: Elara Streetworks Pole	15 Metres
Height of existing building:	N/A
Equipment Housing: Ericsson 6102 (x2)	
Length:	1.300 Metres
Width:	0.700 Metres
Height:	1.450 Metres
Equipment Housing: Alifabs ISC (x1)	
Length:	0.600 Metres
Width:	0.618 Metres
Height:	1.420 Metres
Materials:	
Tower/mast etc. – type of material and external colour:	Elara – Standard grey finish to match existing one being removed.
Equipment housing – external colour:	Green to match existing ones being removed

Reasons for choice of design:

The current installation provides 3G only (internet) coverage to Telefonica and Vodafone customers in the area.

As part of Telefonica's continued network improvement programme, there is a specific requirement for a radio base station upgrade at this location to provide new 2G (voice) and 4G (high speed data) services, plus enhanced and integrated 3G for both Telefonica and Vodafone to improve overall network capacity. The site following the proposed upgrade, will be capable of accommodating new,

more advanced technologies including 4G.

The new streetworks pole is required due to changed radio coverage dynamics (4G) and structural/technical unsuitability of the older pole model currently on site. The proposed pole is 1.2m higher than the existing one in order to provide 4G coverage in addition to the 2G and 3G coverage to this area and to fit the multi-technologies within the same structure and to provide coverage to the residential areas to the east which is higher in elevation.

The antennas within the new structure will be concealed within a cylindrical shroud at the top of the column measuring some 540mm (existing 480mm) in diameter. Underneath the shroud the column width is some 324mm (existing 224mm) throughout the majority of the rest of the column, apart from the lowest 2m of the column which will be 350mm in width. The increase in the shroud width is to accommodate the 4G technology for both operators in addition to 2G and 3G technologies. The pole width is increased slightly to support the additional equipment for the new technologies.

The new cabinets are required to accommodate the equipment supporting the provision of additional frequencies and capacity of the site.

The wider column and shroud and height increase are essential in order to fit all technologies within the same structure and to provide multi-technology coverage to this area particularly to the area of higher elevation to the east. It is the minimalist solution available to provide the required upgrade and the replacement column will be of similar materials to those already in situ. Without the amendments to the column multi technologies for both operators on a single site would not be able to be provided. It is therefore likely that the operators would need to install an additional column elsewhere within the cell area to meet their technological requirements. This would lead to the proliferation of masts contrary to local and national planning guidance.

Development of this site provides an opportunity to improve the existing local telecommunications network and it demonstrates compliance with national (NPPF) and local planning policies which both encourage the usage of existing structures, sharing of telecommunications facilities and the use of sensitively designed masts such as this one which is a shrouded streetworks column. Given that the replacement column will appear as similar as possible to the existing column already in situ where there are lots of other linear structures means this will help the replacement mast blend in with the streetscene.

In light of the operators' efforts to design the best solution for this particular site so as to minimise the impact of the development on the environment, it is considered that the appearance of the replacement column would not seriously impact on the visual amenity of the area, nor would it form an obtrusive feature within the streetscape.

It is therefore considered that the proposal strikes a good balance between environmental impact and operational considerations. The proposed height and design represents the best compromise between the visual impact of the proposal on the surrounding area and meeting the technical requirements for the site. Taking all matters into account, it is considered that this proposal which is to provide new 2G (voice) and 4G (high speed data) service, plus enhanced and integrated 3G (data) for both Telefonica and Vodafone would not be discordant within the street scene.

4. Technical Information

International Commission on Non-Ionizing Radiation Protection (ICNIRP)
Declaration attached:

Yes

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 the site are taken into account.		

Frequency:	2G 900MHz, 3G 2100Mhz and 4G 800Mhz
Modulation characteristics ²	2G (900) –GMSK 3G (2100) – QPSK 4G (800) - QAM
Power output (expressed in EIRP in dBW per carrier)	800 MHz 31dBW 900 MHz 32 dBW 2100 MHz 35 dBW
In order to minimise interference within its own network and with other radio networks, Telefónica UK Ltd operates its network in such a way that the radio frequency power outputs are kept to the lowest levels commensurate with effective service provision. As part of Telefónica UK Ltd's network, the radio base station that is the subject of this application will be configured to operate in this way. 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, which is responsible for the regulation of the civilian radio spectrum. The remit of Ofcom also includes investigation and remedy of any reported significant interference. The telecommunications infrastructure the subject of this application accords with all 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.	

5. Technical Justification

Reason(s) why site required e.g. coverage, upgrade, capacity:
A mobile phone transmitter is designed to cover a specific area and links its coverage to the next site in the network, creating a patchwork of overlapping coverage 'cells' across the county. So, if a person is on the move, the network will transfer their calls from one site to the next. However, in certain areas there will be gaps between these cells, resulting in a loss of coverage. This can be for a variety of reasons, the most common being topography or buildings which block the path of the signal. The

² The modulation method employed in 2G (GSM) is GMSK (Gaussian Minimum Shift Keying) which is a form of Phase modulation

The modulation method employed in 3G (UMTS) is QPSK (Quad Phase Shift Keying) which is another form of Phase Modulation

The modulation method employed in 4G (LTE) is 64 QAM (Quadrature Amplitude Modulation) which is another form of Phase Modulation

operators' network rollout programme is designed to identify and address these gaps within their coverage and ensure that people can use their phones whenever and wherever they are.

The distances between transmitter sites will depend on many factors, including the geography of the mobile services. There is a specific requirement for an upgraded radio base station at this location to provide new 2G (voice) and 4G (high speed data) services, plus enhanced and integrated 3G for both Telefonica and Vodafone to improve overall network capacity.

This single network grid will automatically increase each operator's footprint by 40%, adding competition and choice for customers in areas that previously only had one operator's coverage available and is a principal reason for the proposed upgrade.

Additionally, laying the foundations for a 4G system that provides mobile ultra-broadband internet access, e.g. to laptops with USB wireless modems, to smartphones and to other mobile devices, is desirable. 4G provides superfast mobile broadband and will provide better, faster and more reliable mobile broadband connection according to Ofcom's Chief Executive. OfCom's Chief Executive also acknowledges that down load speeds will initially be at least 5 to 7 times faster than existing 3G networks.

The National Planning Policy Framework states at paragraph 46 that local planning authorities should not question the need for the telecommunications system, which the proposed development is to support. However, for the avoidance of doubt, the proposed installation is to provide new 2G (voice) and 4G (high speed data) services, plus enhanced and integrated 3G for both Telefonica and Vodafone to improve overall network capacity

The Government has expressed its commitment to the UK having the best superfast broadband network (i.e. those services with a headline speed of 30Mbit/s or more) by 2015. It also wants superfast broadband networks to be available to 90% of homes and businesses.

The current installation provides 3G only (internet) coverage to Telefonica and Vodafone customers in the area. The new streetworks pole is required due to changed radio coverage dynamics (4G) and structural/ technical unsuitability of the older pole model.

The new cabinets are required to accommodate the equipment supporting the provision of additional frequencies and capacity of the site.

The area within which an installation needs to be established in order to meet the coverage requirement is constrained by the location and extent of the coverage provided by existing installations in the surrounding area. The proposed scheme utilises an existing established radio base station installation which will be upgraded to provide 2G (voice) and 4G (high speed data) services, plus enhanced and integrated 3G for both Telefonica and Vodafone to improve overall network capacity. This will enable the operators to meet their efficiency, capacity and ever increasing technical capability requirements within a single grid network.

Further detail regarding the general operation of the network can be found in the accompanying document entitled 'General Background Information for Telecommunications Development'. This information is provided to assist the LPA in understanding any technical constraints at the location of the proposed development.

6. 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)

In accordance with the licence obligations and advice in the National Planning Policy Framework and the Code of Best Practice in England the applicant's network rollout team investigated the following siting and design options using this sequential approach to site selection:

- Upgrading their own existing base stations;
- Using existing telecommunications structures belonging to another communications operator. i.e. Mast and/ or site sharing, co-location;
- Installations on existing high buildings or structures including National Grid pylons;
- Using small scale equipment; and finally
- Erecting a new ground based mast site – (1st) Camouflaging or disguising equipment. (2nd) A conventional installation e.g. a lattice mast and compound.

The applicant's site selection strategy is to keep the overall environmental impact to a minimum. Utilising existing masts is always progressed where it is technically and legally possible and where it is the local planning authority's preferred environmental solution. New sites are only developed where there are no viable or accessible alternatives or it is the local planning authority's preferred approach. The feasibility of the acquisition, build and maintenance of the site also needs to be taken into account.

In accordance with the above sequential approach, and in line with the principles of pooling the two operators existing network infrastructure to create a single network grid, the proposal is to upgrade the existing base station in this location.

Site	Site Name and address	NGR	Reason for not choosing
N/A	N/A	N/A	N/A

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

As referred to above, the applicant has taken a sequential approach and is seeking to redevelop an existing installation to enable a single grid network using MORAN technology to service to the local surrounding area. It is considered that utilising an existing established radio base station installation is preferable to pursuing a second base station within the immediate vicinity, as it would reduce the visual impact therefore preserving the character and amenity of the area. Given the makeup of the area and the siting of existing telecoms infrastructure on the site, it was established that the upgrading of facilities through the use of existing infrastructure would be the most viable solution. Based on this sequential approach no other sites have been considered.

Additional relevant information:

Siting

The site is set on the boundary of an industrial and a residential area. The precise site location is on a strip of adopted grass verge off Wood Street close the junction of New Street. Due to technical reasons the replacement column will be positioned 3.5m further south west along the grassed area than the existing column. This slight change in position is minimal and for all intents and purposes will be seen as being in the same location as the existing telecommunications mast, where the siting of this radio base station has previously been considered to be acceptable and become part of the established streetscene on Wood Street.

Although the site is located close to a residential area, it has been intentionally sited on its periphery and adjacent to a commercial/industrial area to minimise any impacts on the residential amenity of the area, where there is a specific requirement for a radio base station upgrade at this location to provide new 2G (voice) and 4G (high speed data) services, plus enhanced and integrated 3G for both Telefonica and Vodafone to improve overall capacity. The site following the proposed upgrade, will be capable of accommodating new, more advanced technologies for this cell area so that customers will be able to continue to use their smartphones and tablet computers whenever and wherever they are to access services such as instant messaging, emailing, video calls,

downstreaming data to name just a few of the benefits of the latest technologies that 3G and 4G provides.

Utilising an existing established radio base station and installing a replacement column at a slightly increased height and having a similar appearance to the existing installation will reduce the cumulative number of base stations in this area that are required and meets with the requirements for minimising the number of radio base stations as set out in NPPF.

The proposal will be located on a small section of grass verge hence there will be no compound enclosure and the development will be accessible within the public realm. Nevertheless, the ground based equipment cabinets have an appearance similar to other communications and electrical service boxes found in typical streetscenes in which similar operations can be likened.

It is likely that once built, the site will be visited infrequently for maintenance purposes only, as is currently the case. Access to the site will be by foot in which the applicant would gain access to the equipment housed within the cabinets. In the event of the antennas within the mast needing to be maintained this will be achieved by siting a cherry picker with a hydraulic platform alongside the base station.

Highways Safety

The cabinets and column have been sited on the grassed area some distance from the highway, whereby their presence will not impair the visibility or safety of passing motorists or pedestrians.

Due to the equipment proposed, engineers would generally not have cause to visit the site more than twice a year. All works undertaken at the site is subject to an extensive Risk Assessment, which details procedures relating to vehicle parking and pedestrian management to ensure disruption to traffic flow is eliminated whenever possible and the safety of pedestrians and road users is assured.

Visual Appearance

The need for additional structures will be kept to a minimum through the removal and replacement of the existing column on the site. However, the operator recognises the need to minimise the visual impact of any new structure on the site. The slim-line column is the thinnest possible in order to house the 2G, 3G and 4G technologies on the same structure, thus allowing both operators to utilise the same apparatus having a similar appearance as the column it replaces albeit at a slightly wider shroud diameter and column width and increased height.

The new streetworks pole is required due to changed radio coverage dynamics (4G) and structural/technical unsuitability of the older pole model currently on site. The proposed pole is 1.2m higher than the existing pole. The wider column and shroud and height increase are essential in order to fit all technologies within the same structure and to provide multi-technology coverage to this area particularly to the area of higher elevation to the east which requires the slight height increase. If the shroud and column were any lower in height or slimmer, then the technologies would not be able to be accommodated within the same structure and an additional column would be required, which would lead to the proliferation of masts, contrary to national and local planning policy.

The replacement column of 15m is required in order to accommodate both operators' antennas and feeders within the same structure at a height to provide adequate 4G as well as 2G and 3G coverage to this area, particularly to the area of higher elevation to the east where there are current unacceptable issues with the 3G coverage being provided here. This will allow the required improvements to network coverage to be provided. As the column is a similar type of sensitively designed column to the one it replaces, the impact on visual amenity within the streetscene will not be detrimental.

The proposed cabinets can be painted in an appropriate colour in order to help it merge with its surroundings, although green is proposed to match the existing equipment cabinets already in situ.

The applicant will comply fully with all conditions relating to the colouring of the equipment.

In light of the operator's efforts to design the best solution for this particular site so as to minimise the impact of development on the local environment, it is considered that the appearance of the replacement column would not seriously impact upon the visual amenity of the area, nor would it form an obtrusive feature within the streetscene.

Possible Electrical Interference

We can advise on behalf of the client that the proposed installation should not cause any undue electrical interference for nearby residents. Telefonica UK Limited operates within radio bands which are licensed and specific to them and this is regulated in the UK by the Office of Communications (Ofcom).

Health and Safety

The latest government research conducted by the Independent Expert Group on Mobile Phone Technology titled "Mobile Phones and Health" (also known as the Stewart Report) concluded that "the balance of evidence indicates that there is no general risk to the health of people living near to base stations on the basis that exposures are expected to be small fractions of the guidelines".

However, the report also recommended as a precautionary approach that the ICNIRP guidelines for public exposure be adopted in the UK. In response to the report, the Government has stated that emissions from base stations should meet the ICNIRP guidelines and that if they do then local authorities need take no further action. As such, a new ICNIRP declaration is required and attached to this application for this proposal.

Noise

There will be no noise issues related to this site.

Planning Policy Framework

Planning policy is provided at national level by the National Planning Policy Framework (NPPF). It is a material consideration in planning decisions.

National Planning Policy Framework

The National Planning Policy Framework (NPPF) supports high quality communications infrastructure and recognises it as a strategic priority.

Paragraph 43 states that '*Local Planning Authorities should support the expansion of electronic communications networks, including telecommunications and high speed broadband*'. It goes on to acknowledge that the numbers of radio and telecommunications masts and the sites for such installations should be kept to the minimum consistent with the efficient operation of the network. The NPPF supports the use of existing masts, buildings and other structures, unless the need for a new site has been justified. It goes on to state that where new sites are required, the equipment should be sympathetically designed and camouflaged where appropriate.

NPPF paragraph 46 sets out a clear message to local planning authorities on health issues and the need for telecommunications systems. It states that '*local planning authorities must determine applications on planning grounds. They should not seek to prevent competition between different operators, question the need for the telecommunications system, or determine health safeguards if the proposal meets International Commission guidelines for public exposure*'.

Throughout the NPPF there is strong support for sustainable development which is summed up in paragraph 14 which states 'At the heart of the National Planning Policy Framework is a presumption

in favour of sustainable development, which should be seen as a golden thread running through both plan making and decision taking. For decision-taking this means:

- Approving development proposals that accord with the development plan without delay; and
- Where the development plan is absent, silent or relevant policies are out-of-date, granting planning permission unless:
 - Any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole; or
 - Specific policies in this Framework indicate development should be restricted.

Section 7 of the NPPF sets out the requirement for good design and states at paragraph 56 that *'the Government attaches great importance to the design of the built environment. Good design is a key aspect of sustainable development, is indivisible from good planning, and should contribute positively to making places better for people'*. Paragraph 65 goes on to state that *'local planning authorities should not refuse planning permission for buildings or infrastructure which promote high levels of sustainability because of concerns about incompatibility with an existing townscape, if those concerns have been mitigated by good design'*.

The NPPF sets out 12 core principles which should underpin plan-making and decision-making these principles include that every effort should be made objectively to identify and meet development needs of an area, and respond positively to wider opportunities for growth (para 17).

Code of Best Practice on Mobile Phone Network Development in England (July 2013)

The Code of Best Practice provides guidance primarily to mobile network operators, their agents and contractors and to local planning authorities in England. It supersedes the Code of Best Practice on Mobile Phone Network Development (2002).

The principal aim of this Code is to ensure that the Government's objective of supporting high quality communications infrastructure is achieved in a timely manner, but in a way that also minimises the potential impact that can be associated with such development. It provides clear and practical advice to ensure the delivery of significantly better and more effective communication and consultation between operators, local authorities and local residents.

The Code highlights that the mobile telecommunications network is a crucial piece of national infrastructure in both economic and social terms. It acknowledges that the pressure on networks to upgrade and improve networks through changes to existing sites and the development of new sites is constant. With the increasing consumer demand and the Government's ambitious aspirations it is becoming more important to improve connectivity and capacity. This is due to the ever increasing demand for data hungry applications. However, The Code notes that upgrading and improving mobile networks will not be possible without the necessary infrastructure on which they rely.

The Code acknowledges that the operators anticipate largely using existing network infrastructure for the provision of 4G services and are similarly upgrading their 2G and 3G network infrastructure to improve capacity and coverage. However, the Code goes on to state that this does not mean that there will not be a need for new base stations. More base stations will be needed in areas where there has previously been only limited or no coverage, and where coverage and capacity needs to be enhanced in line with Government Policy and customer demand or where sites have been lost for example due to redevelopment.

Mast and site sharing continues to be supported within both Government policy and the Code of Best Practice. The Code acknowledges that shared sites will tend to be slightly bigger (such as in this case), but fewer sites will be needed overall to improve coverage and capacity. The Code acknowledges that sharing of sites is now the norm, and network operators now share much of their network infrastructure via joint venture commercial arrangements.

Due to the character of the cell area being residential mixed with industrial, the applicant has designed a relatively slender mast rather than the use of a more traditional monopole column which would be considered incongruous and it is likely that such a proposal would have an unacceptable visual impact in this mixed and dense area containing residential properties to the south. It is therefore considered that the use of a 15m high, slim-line pole would eliminate the large number of bracing components associated with other more prominent installation designs such as 'traditional' lattice/monopole structures.

The Code provides guidance on siting and design at Appendix B and continues to acknowledge that camouflaging or disguising equipment is considered materially appropriate with more modern masts frequently able to blend into their surroundings far more effectively than some of the older masts. In reducing the environmental and visual impact of the installation the Code of Best Practice promotes the use of simple and uncomplicated designs. *"Masts which have complex designs are more likely to dominate and be in discord with the landscape and have adverse visual impacts."* In this regard, the proposed replacement slim-line column with hidden antennas will ensure that the environmental and visual impact of the equipment remains low as the column itself will appear similar to other vertical structures within the immediate area minimising the environmental and visual impact of the equipment.

Concerning the erection of new ground based masts; The Code provides examples of where the environmental and visual impact of the mast can be greatly reduced.

- *Placing the mast near similar structures. For example, industrial and commercial premises, road signs and lamp posts;*
- *Using simple and unfussy designs. Masts which have complex designs are more likely to dominate and be in discord with the landscape and have adverse visual impacts; and*
- *Appropriate colouring.*

Local Policy

Section 38 (6) of the Planning and Compulsory Purchase Act 2004 states that "If regard is to be had to the development plan for the purpose of any determination to be made under the planning acts the determination must be made in accordance with the plan unless material considerations indicate otherwise".

The development plan as defined by the Planning and Compulsory Purchase Act 2004 for Barnsley Metropolitan Borough Council comprises the Core Strategy, the Barnsley Education Sites Development Plan Document (DPD) (both of which form part of the Local Development Framework), the remaining saved policies of the Unitary Development Plan, and the Regional Spatial Strategy.

Barnsley MBC is currently producing a Local Plan. Its status is that it is currently at public consultation stage which ended on the 11th January 2015. This new local plan (once adopted) will replace the Core Strategy and Unitary Development Plan.

There is no current statutory policy pertaining specifically to telecommunications as 'Policy UTL5 Telecommunications' of the UDP is not a 'saved' policy.

Barnsley Core Strategy (2011)

CSP 29 Design Principles:

High quality development will be expected, that respects, takes advantage of and enhances the distinctive features of Barnsley, including:

- topography, Green Infrastructure assets, important habitats, woodlands and other natural features
- views and vistas to key buildings, landmarks, skylines and gateways

- heritage, townscape and landscape character including the scale, layout, building styles and materials of the built form particularly in and around: Barnsley Town Centre
Penistone and the rural villages in the west of the borough within and adjacent to Conservation Areas

Development should:

- contribute to place making and be of a high quality, that contributes to a healthy, safe and sustainable environment
- help to transform the character of physical environments that have become run down and are lacking in distinctiveness
- enable all people to gain access safely and conveniently, providing, in particular, for the needs of families and children, and of disabled people and older people
- contribute towards creating attractive, sustainable and successful neighbourhoods
- achieve a Building For Life assessment rating of 'good' or equivalent as a minimum, in developments of 10 or more dwellings

Barnsley Local Plan Consultation Draft 2014

25 Utilities

25.1 The National Planning Policy Framework requires local planning authorities to work with other authorities and providers to assess the quality and capacity of all types of infrastructure including utilities, and its ability to meet the forecast demands. The responsibility and resources to provide services rests with the utilities companies, however, we must make sure that we co-ordinate the development of an effective network of services with existing and proposed development. We will support new services development, and will work with operators to make sure that any proposed development is well positioned and designed.

Evaluation in Light of National and Local Policy

The NPPF clearly highlights the government's positive stance regarding telecommunications and broadband development and the support whilst noting the environmental and social benefits telecommunications can provide.

The proposed replacement telecommunications installation close to the junction of Wood Street and New Street fully complies with the objectives of the NPPF, as it states [par 43] that the number of radio and telecommunication masts should be kept to a minimum consistent with the efficient operation of the network. Existing masts, buildings and other structures should be used unless the need of a new site has been justified [NPPF para 43].

The application site is an established telecommunications site whereby the proposed replacement structure is being proposed for 2 no. operators to utilise one single network grid point in accordance with the NPPF and Code of Best Practise as it offers the best environmental solution by limiting the visual intrusion in the area.

The principle of a telecommunications base station installation at this location has already been accepted by the Council and has become part of the established streetscene. The proposed upgrade to the existing site is sequentially the most preferable option as it is to be sited as close as possible to the existing structure. The proposed design is intentionally as similar as possible to mimic the existing structure in terms of colouring, height and width as is technically possible to minimise any impacts in the surrounding area which contains a number of existing vertical structures most notably existing lighting columns and totem poles which help to absorb and assimilate the proposal into this streetscene.

In accordance with the NPPF, Barnsley Core Strategy CSP 29 and Barnsley Local Plan Consultation

Draft 2014 great care was taken with regards to the design of the proposed structure which is one of the most sensitive designs available to operators, being a pole with a cylindrical shroud at the top. The proposed pole is 1.2m higher than the existing one which is necessary at this location for the antennas to have a clear line of sight, without compromising the quality of the new 4G high speed internet network for both operators in addition to the 2G and 3G technologies which would be considered technically unacceptable at the height of the existing structure.

The replacement column of 15m is required in order to accommodate both operators' antennas and feeders within the same structure at a height to provide adequate 4G as well as 2G and 3G coverage to this area, particularly to the area of higher elevation to the east where there are current unacceptable issues with the 3G coverage being provided here. This will allow the required improvements to network coverage to be provided. As the column is a similar type of sensitively designed column to the one it replaces, the impact on visual amenity within the streetscene will not be detrimental.

The wider column and shroud and height increase are essential in order to fit all technologies within the same structure. It is the minimalist solution available to provide the required upgrade and the replacement column will be of similar materials to those already in situ. Without the amendments to the column multi technologies for both operators on a single site would not be able to be provided. It is therefore likely that the operators would need to install an additional column elsewhere within the cell area to meet their technological requirements. This would lead to the proliferation of masts contrary to local and national planning guidance. Given that the replacement column will appear as similar as possible to the existing column already in situ where there are lots of other linear structures and trees and bushes this will help the replacement mast blend in with the streetscene.

The Code of Best Practise acknowledges that shared structures tend to be higher. The cylindrical shroud is 60mm wider than the existing one to accommodate the additional different technologies for both operators. However, due to the gentle tapering at the point where the column and shroud are joined the column will appear less prominent in the streetscene and more streamlined. As a result it will blend in more easily with the other linear structures within the area.

It is acknowledged that there are some residential properties to the west and south of the site. However, given that the replacement pole will be of a similar appearance to the existing column already in situ, together with the distance, orientation and existing street furniture adjacent to disused industrial warehousing, means that the proposed upgrade to the existing radio base station will not cause a significant loss of residential amenity in accordance with the NPPF and Code of Best Practice.

The NPPF states at paragraph 43 that local planning authorities should support the expansion of electronic communications networks, including telecommunications and high speed broadband. It acknowledges that high quality communications infrastructure is essential for sustainable economic growth. The NPPF also highlights that the development of high speed broadband technology also plays a vital role in enhancing the provision of local community facilities and services.

Taking all these factors into consideration, it is our opinion that the proposal meets all local policy requirements of Barnsley MBC and national policy as set out in the NPPF.

Conclusion

Taking into consideration all the relevant factors set out herein this document, it is considered that this telecommunications base station upgrade at Wood Street is the optimum solution in terms of providing the required technology coverage, minimising any adverse impacts on local amenity and the surrounding landscape. The proposal is fully compliant with the NPPF [par 14, 17, 43, 46, 56, 65], Code of Best Practise on Mobile Phone Development, Barnsley Core Strategy [CSP29] and Barnsley Local Plan Consultation Draft [25].

For these reasons it is considered that this planning application should be approved.

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