

Our Ref: 66214/MAN074/Blackbird/RD

17 February 2022

Chief Planning Officer
Manchester City Council
PO Box 532
Town Hall
Greater Manchester
M50 2LA

SUBMITTED VIA PLANNING PORTAL

Dear Sir/Madam,

**PLANNING APPLICATION FOR TELECOMMUNICATIONS UPGRADE AT PRINTWORKS, 27 WITHY GROVE, EXCHANGE SQUARE, MANCHESTER, M4 2BS
(NGR: E 384115 / N 398740) (SITE REF: 66214)**

Avison Young are planning consultants acting on behalf of Mobile Broadband Network Limited (MBNL), which is a joint venture co-owned by EE Limited and H3G UK Limited, to submit the application contained herein for the upgrade of an existing telecommunications base station as proposed below.

Description of Development:

The removal and replacement of 2No. Existing antennas with 3No. Upgraded antennas located on the rooftop, The removal and replacement of 2No. RBS6130 cabinets and 2No. BTS3900A cabinets with 1No. Airo cabinet, the installation of 1No. GPS unit affixed to an antenna support pole and ancillary development thereto.

Enclosed you will find an application prepared on behalf of EE Limited and H3G UK Limited who are licensed operators that provide Cellular Network based upon the Global System for Mobile (GSM) standard and Universal Mobile Telecommunications System (UMTS) within the United Kingdom.

The supporting documents submitted with this application are as follows:

- Application Form (as generated through Planning Portal)
- Drawings 66214_PRINTWORKS_002, 100, 101, 150, 151, 200, 201, 250, 251_B
- Planning, Design and Access Statement and Heritage Statement
- ICNIRP Certificate
- 5G and Future Technology
- Connected Growth Manual – Digital Infrastructure

- IET Guide to 5G

The application fee of £462 will be paid via the Planning Portal.

We trust you will find the enclosed information sufficient to register and validate the application.

Should you require any further information, please contact me on the below details.

Yours faithfully,



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Avison Young (UK) Limited for and on behalf of Mobile Network Broadband Limited

PLANNING, DESIGN AND ACCESS STATEMENT

The following design and access statement is enclosed in support of this proposal and demonstrates the general development principles that have been adopted in the final detailed design of this proposal.

1. HISTORY & BACKGROUND

Everything Everywhere Limited is a 50-50 joint venture between Deutsche Telekom and France Télécom and was formed in 2010 through the merger of their respective T-Mobile (UK) and Orange U.K. businesses. On 3 September 2010, Everything Everywhere announced that Orange would join Mobile Broadband Network Ltd (MBNL), the joint venture management company formed in December 2007 between T-Mobile UK Ltd and Hutchison 3G UK Ltd (H3G UK). In 2016, Everything Everywhere was chosen to work in conjunction with the Home Office to deliver the Emergency Services Network (ESN), which will deliver a smarter, better and cheaper communications capability.

The proposed upgrade subject to this application is part of the operators' continuous efforts to improve the existing 3G and 4G network across the country, in addition to introducing 5G technology to cater for current and future customer demands. It is evident that mobile phone usage has grown exponentially over recent years as more than 90% of the population now own a mobile phone. Customers expect to be able to use their mobile phones and tablets in all locations as these devices have become intrinsic to our personal and professional lives. UK operators are continuously trying to improve their network infrastructure in order to adapt to the changing environment and keep up with customer demands. With constant advancements in radio technology, it is therefore a natural consequence for base stations to be upgraded to accommodate newer versions of radio equipment.

As part of EE and H3G's ongoing network programme, there is a requirement for infrastructure improvements in this area of Manchester and the surrounding local community. The proposed upgrade works will allow for better coverage and increased capacity to satisfy the traffic demands set by mobile users passing through this region, and will also help towards futureproofing the network to reduce the frequency of works required at the site.

Site Selection

The applicant has adopted a sequential approach to site selection which is encouraged in the Code of Best Practice for Mobile Operators and the NPPF. Efforts have been made to utilise existing telecommunications sites wherever possible to prevent the proliferation of base stations. In this instance there was a suitable existing base station in the search area that could be upgraded to accommodate the required technologies for the operator's needs. As a result, it was not required to identify alternative site options.

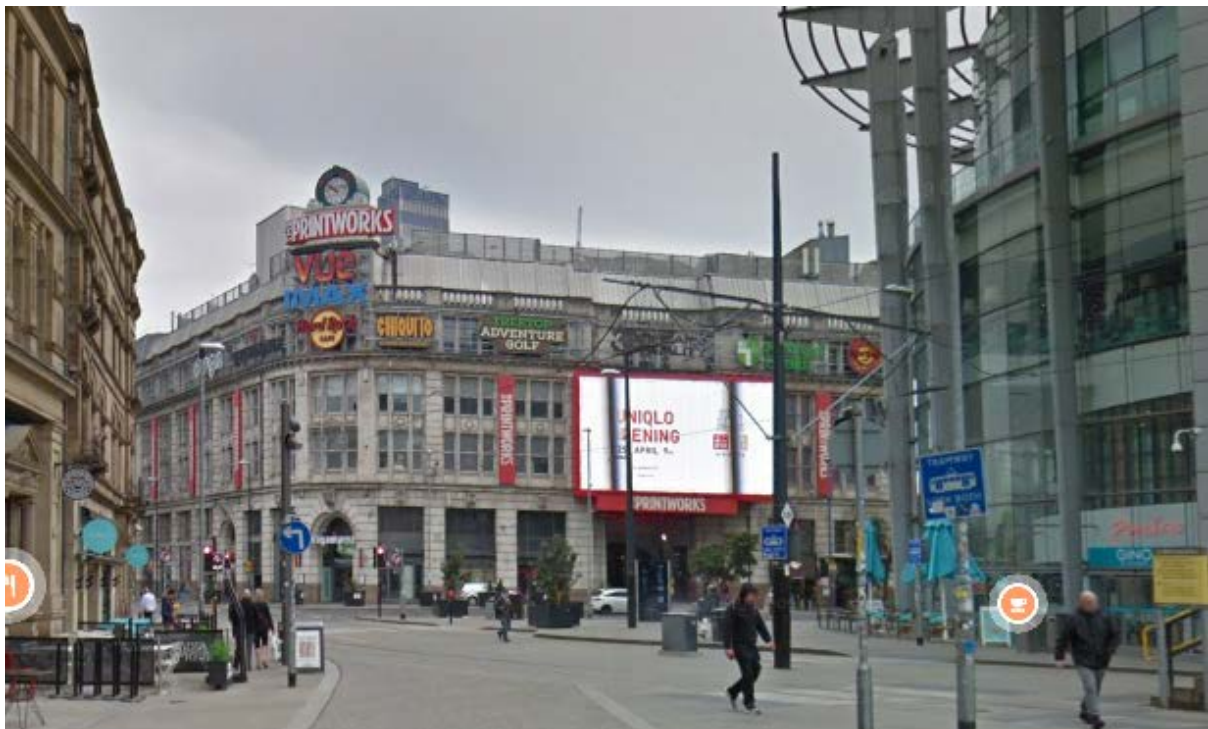
2. DESIGN

2.1 THE PROPOSAL

The application site is located at Printworks, Manchester. The host building is an existing base station which is an established feature of this streetscape that serves as an important cell within

the wider mobile network due to the high density of users in this urban environment. The buildings surrounding the site are predominantly used for commercial/retail purposes. The proposed works comprise the removal and replacement of 2No. Existing antennas with 3No. Upgraded antennas located on the rooftop, The removal and replacement of 2No. RBS6130 cabinets and 2No. BTS3900A cabinets with 1No. Airo cabinet, the installation of 1No. GPS unit affixed to an antenna support pole and ancillary development thereto.

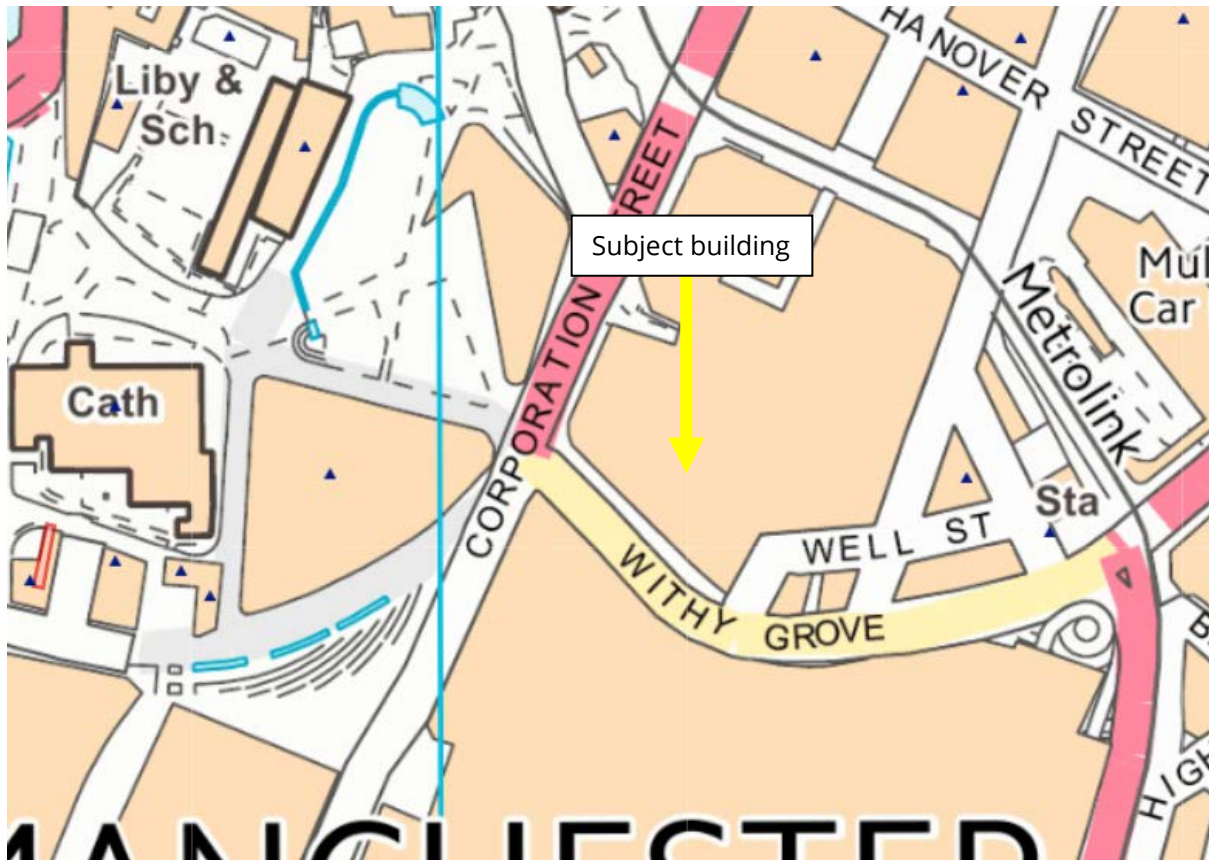
As the site proposes the installation of a new tripod frame on a building located within the Shudehill Conservation area, an application for full planning is submitted herein.



Heritage Statement

Shudehill conservation area was designated in January 1987. The conservation area is bounded by Hanover Street, Riga Street, Mayes Street, Shudehill, Withy Grove and Corporation Street. It also includes one building on the north side of Hanover Street, fronting Corporation Street. Until the mid-18th century, the Shudehill area had been semi rural with limited residential development, but by 1793 the whole of Shudehill was built up and included commercial property.

Although the site is located within a conservation area it is not located on a listed building as referenced in the below image where listed buildings are represented by blue triangles.



Historic England Map of listed buildings

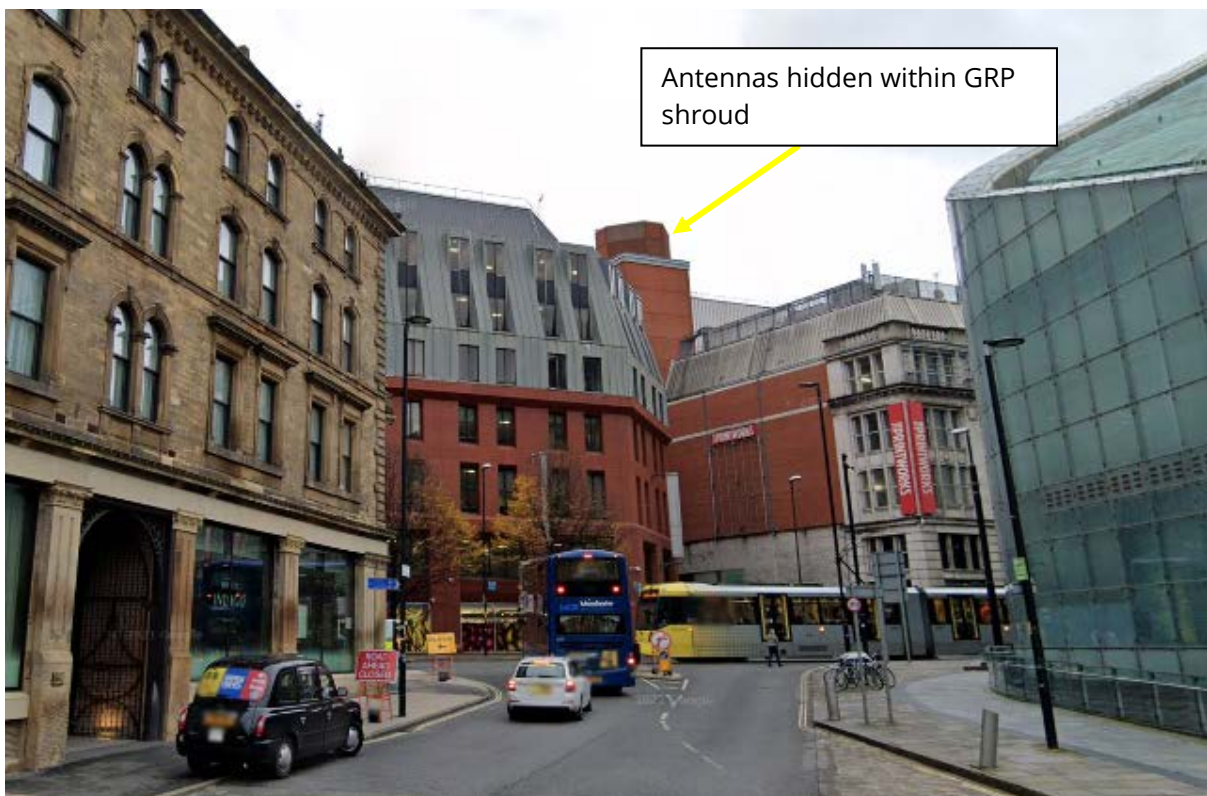
2.2 DESIGN CONSIDERATIONS - SITING AND APPEARANCE

The applicant has sought to cause as little impact on the visual amenity of the area as possible whilst also ensuring that sufficient coverage requirements are achieved. A further explanation of the application's technical justification is explained in a later section of this statement however, it should be acknowledged from the offset that the proposed 3No. antennas is technically necessary in order to create the power and capacity that the 5G frequency demands. Moreover, the proposed height of the antennas is the lowest possible height to ensure correct signal conveyance whereby a reduction in height may impact on the site's functionality as well as health and safety in relation to ICNIRP compliance. The operator's general practice will always endeavour to propose the minimum height and least amount of equipment necessary to sufficiently achieve the desired coverage levels and it should be recognised that any reduction in height or equipment would compromise the site's effectiveness within the network. There are no alternative design solutions available with the required technologies meaning the proposed scheme is the least visually intrusive design for the site's upgrade.

Whilst it is not necessary to outline alternative locations as the proposal seeks to utilise an existing base station, it should be noted that if an upgrade cannot be progressed at this location, a new base station within proximity to this site would be required to satisfy coverage objectives. The existing base station was deemed acceptable in its inception meaning that no concerns were raised in relation to its proximity to the surrounding character and associated sensitive assets. Though it is recognised that changes to a telecommunications site will to a degree be recognisable in any given environment, the visibility of equipment does not automatically lead to detrimental

harm as each site must be assessed on its own merits and balanced against the public benefits to be provided in accordance with Paragraph 202 (NPPF). In this respect significant weight should be given to improving existing 4G coverage and introducing 5G technologies in recognition of the government's support for this form of development. The application site is an established feature of this urban street scene where telecommunications equipment is commonly found which sets precedence at this location, and this is further evidenced by the presence of other licensed operators.

With consideration for the existing layout at present, it is acknowledged that these proposed changes will be recognisable to an extent. However, the presence of telecommunications apparatus is an accepted and established feature of this building which is an important context to establish. The 1No. additional antenna affixed to the proposed freestanding frame will be positioned near to the easterly edge of the roof at a height of 27.7 metres above ground level. This design will see a slight increase in the overall height of antennas located on the rooftop of 2.70 metres. The 2No. antennas to sectors A & C will be positioned behind a GRP shroud on the plantroom roof and will not be visible from ground level. The proposed replacement cabinet will be located to the centre of the rooftop and will not be visible from ground level. It is considered that the impact of the proposal will be negligible as views of the antennas from ground level will be restricted due to the height of the host building and other buildings in close proximity.



View of the site From Todd Street



Google maps image showing proposed frame location and density of surrounding buildings

Taken as a whole, the antennas will be read within the same air space across the skyline and compared to the existing site the cumulative effects of the proposed equipment are insignificant. Consequently, it is thought that the visual amenity is not detrimentally affected by this upgrade scheme. As referenced by the above image, views of the equipment will be limited to With Grove and Dantzig Street due to the built-up urban nature of the surrounding area. Furthermore, additional regard should also be given to the natural eye line of local residents and passers-by as the equipment is located on a rooftop in which visibility would necessitate a bystander to purposefully look upwards. The applicant believes such views would be uncommon and irregular which in turn reduces the risk of visual prominence. Given that the host building is approximately 27.7 metres in height; the visibility of the base station at ground level is heavily restricted to oblique views for local residents and passers-by.

The proposed design is considered to be respectful of the surrounding area and does not cause detrimental harm to the visual amenity of the immediate environment. The siting and appearance of this proposal is therefore within the boundaries of acceptability as it will cause minimal interruption to the current landscape and is in line with the NPPF of utilising existing sites and buildings.

Overall, it is considered that the scheme does not demonstrate substantial harm to the surrounding heritage assets, and in any event, it is argued that the public benefits of the proposal would outweigh any perceived harm. As the scheme seeks to introduce 5G technologies during a climate where economic recovery is paramount, the public benefits associated with this upgrade cannot be undervalued.

3. PLANNING POLICY CONSIDERATIONS

Section 38 (6) of the Planning and Compulsory Purchase Act 2004 states that Local Planning Authorities should determine proposals in accordance with development plan policies, unless material considerations indicate otherwise. Material considerations may include, inter alia, central government guidance, High Court and Inspector's decisions etc.

3.1 LOCAL PLANNING POLICY

The following local planning policies are relative and have been considered in the submission of this application. It is argued that the proposal is in accordance with the below policies which promote high-quality connectivity and supports new telecommunications infrastructure when it can be demonstrated that the design and siting of the base station is respectful to its surroundings.

Manchester's Local Development Framework - Core Strategy Development Plan Document (Adopted 11th July 2012)

Policy SP1 Spatial Principles

In accordance with the Council's spatial principles, the proposed development will have a positive impact on the social and economic development of the area which will improve digital communication for residents, local businesses and visitors as a result. The Council is focussed on supporting development that contribute to developing high quality places in which the demanding need for high speed mobile coverage is an important utility in this respect.

Policy EN1 Design Principles and Strategic Character Areas

The proposed development is in line with the seven principles of urban design as identified in national planning guidance. The applicant has taken the existing context and setting of the area into consideration in the design of this proposal, which is considered to be respectful to the current surroundings and is of appropriate scale, height and bulk to preserve visual amenity. Following on from the previous section the scheme has demonstrated minimal harm when taking into account the current context of the site and is therefore acceptable in regards to matters of siting and appearance.

Policy EN3 Heritage

In relation to this policy, the site is located within a conservation area, but is not on a listed building. The fact there is existing equipment already located on the rooftop sets a precedence for telecommunications development in this area. The proposal has been designed using the least amount of equipment required to meet operational needs. It is considered that public benefits of increased connectivity outweigh the minimal visual impact on the host building and wider conservation area. This option has been weighed up against other options that are available, and it is considered that this proposal has the least visual impact.

The Greater Manchester Digital Blueprint (April 2020)

In addition to these documents, The Greater Manchester Digital Blueprint (April 2020) is also relative to this application as this document sets out the Council's ambition to be a world-leading

digital city region. Through the investment of digital infrastructure, connectivity and transport, the City will be able to offer a breadth of creative services, ecommerce, technology hardware and software. The Council aims to create “a digital place where innovators from across the globe want to tap into and a place where businesses already here can thrive.” In support of these objectives, the application herein will positively contribute to developing the digital framework of Manchester as a City that enhances the connectivity for current and future businesses as well as local residents and visitors.

3.2 NATIONAL PLANNING POLICY FRAMEWORK

This legislation was formally adopted in July 2021. In relation to this policy the following sections are relevant in determining this application:

Section 2 – Achieving Sustainable Development

Paragraph 7 – *“The purpose of the planning system is to contribute to the achievement of sustainable development. At a very high level, the objective of sustainable development can be summarised as meeting the needs of the present without compromising the ability of future generations to meet their own needs.”*

The NPPF also encourages the achievement of sustainable development which can provide public benefits to building stronger and more competitive economic areas, as well as enhancing social communities through increased communication and connectivity. These benefits feed into the overarching economic and social objectives of the NPPF.

Section 4 – Decision-Making

Paragraph 38 – *“Local planning authorities should approach decisions on proposed development in a positive and creative way. They should use the full range of planning tools available, including brownfield registers and permission in principle, and work proactively with applicants to secure developments that will improve the economic, social and environmental conditions of the area. Decision-makers at every level should seek to approve applications for sustainable development where possible.”*

Section 6 – Building a strong, competitive economy

Paragraph 81 – *“Significant weight should be placed on the need to support economic growth and productivity... This is particularly important where Britain can be a global leader in driving innovation.”*

Section 10 – Supporting high quality communications

Paragraph 114 – *“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.”*

In relation to these paragraphs, the Government’s Industrial Strategy sets out a vision to drive productivity improvements across the UK, and sets out a delivery programme to make the UK a leader in “artificial intelligence and big data”. The improvement of telecommunications capacity and provision of 5G is imperative to allow for areas to be connected, and is essential for economic growth which is expected to be delivered and upgraded over time.

Paragraph 115 – *“The number of radio and electronic communications masts, and the sites for such installation, 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. Use of existing masts, buildings and other structures for new electronic communications capability (including wireless) should be encouraged. Where new sites are required (such as for new 5G networks, or for connected transport and smart city applications), equipment should be sympathetically designed and camouflaged where appropriate.”*

In relation to this paragraph, it is demonstrated that a sequential approach to site selection has been adopted to ensure that existing telecommunications installations have been explored in the first instance to prevent unnecessary proliferation of masts. In this instance an existing base station has been identified for an upgrade scheme which negates the need to explore new locations.

Paragraph 116 – *“Local planning authorities should not impose a ban on new electronic communications development in certain areas, impose blanket Article 4 directions over a wide area or a wide range of electronic communications development, or insist on minimum distances between new electronic communications development and existing development. They should ensure that:*

- a) They have evidence to demonstrate that electronic communications infrastructure is not expected to cause significant and irremediable interference with other electrical equipment, air traffic services or instrumentation operated in the national interest; and*
- b) They have considered the possibility of the construction of new buildings or other structure interfering with broadcast and electronic communications services.”*

Paragraph 117 – *“Applications for electronic communications development (including applications for prior approval under the General Permitted Development Order) should be supported by the necessary evidence to justify the proposed development. This should include:*

- a) The outcome of consultations with organisations with an interest in the proposed development, in particular with the relevant body where a mast is to be installed near a school or college, or within a statutory safeguarding zone surrounding an aerodrome, technical site or military explosives storage area; and*
- b) For an addition to an existing mast or base station, a statement that self-certifies that the cumulative exposure, when operational, will not exceed International Commission guidelines on non-ionising radiation protection; or*
- c) For a new mast or base station, evidence that the applicant has explored the possibility of erecting antennas on an existing building, mast or other structure and a statement that self-certifies that, when operational, International Commission guidelines will be met.”*

In relation to this paragraph, the site is not located within 3km of a statutory safeguarding zone surrounding an aerodrome, technical site or military explosives storage area, or within close proximity of any schools or colleges. An ICNIRP certificate is provided with this application to confirm that the proposal will not exceed International Commission guidelines. As the scheme is utilising an existing base station, it was not necessary to identify alternative site options.

Paragraph 118 – *“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."

Section 12 – Achieving well-designed places

Paragraph 126 – *"The creation of high quality, beautiful and sustainable buildings and places is fundamental to what the planning and development process should achieve. Good design is a key aspect of sustainable development, creates better places in which to live and work and helps make development acceptable to communities."*

In relation to this paragraph, the application seeks to upgrade an existing telecommunications site located on Withy Grove and the proposed equipment is the least amount possible to allow the site to transmit sufficiently; we therefore consider this design to be respectful to the character of the area. Although the site's change in appearance will to an extent be recognisable features of this street scene, efforts have been made to limit the visual impact on the surrounding amenity.

Section 16 – Conserving and enhancing the historic environment

Paragraph 194 – *"In determining applications, local planning authorities should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting. The level of detail should be proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance. As a minimum the relevant historic environment record should have been consulted and the heritage assets assessed using appropriate expertise where necessary."*

In relation to this paragraph, the relevant historic environment records are referred to within the Heritage Statement of this document and the impact of the proposal on these historical assets are explained in Design Considerations section.

Paragraph 201 – *"Where a proposed development will lead to substantial harm to (or total loss of significance of) a designated heritage asset, local planning authorities should refuse consent, unless it can be demonstrated that the substantial harm or total loss is necessary to achieve substantial public benefits that outweigh that harm or loss..."*

Paragraph 202 – *"Where a development proposal will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal including, where appropriate, securing its optimum viable use."*

It is considered that the proposal is in accordance with these paragraphs as the application has been designed sensitively to be respectful of the identified heritage assets. Considerable efforts have been made to ensure the least amount of potential impact is imposed when balanced against technical constraints and the advancement of digital connectivity carries significant weight when considering the public benefits to be provided. Mobile operators are obligated to provide high quality connectivity across the country as a licensed utility provider in which sensitive land designations are often unavoidable circumstances to ensure continuous coverage.

To conclude, the applicant therefore considers the proposal to be in accordance with local and national planning policies.

4. TECHNICAL JUSTIFICATION

In the assessment of this application, material weight should be given to the public benefits that will be provided to local residents and visitors in this area. The site will form part of an improved coverage network which will also introduce 5G technology to allow for faster download speeds and better signal. More information on 5G can be found in the accompanying documents: *5G and Future Technology, Connected Growth Manual Digital Infrastructure* and *The Institution of Engineering and Technology's Guide for Local Planning Authorities Regarding 5G Masts and Small Cells*.

The demand and focus on delivering the 5th generation of mobile phone technology is the primary objective of licensed operators in the UK. In today's climate the existing 4G network has allowed users to video stream at much faster data speeds allowing the integration of smart phones into wider uses than previous generations. The inevitable consequence of technological advancements means that customers expect tasks to become even quicker and simpler.

To quote the *5G and Future Technology* document, *"It is estimated that 5G will directly contribute to an additional £7 Billion a year to the UK economy in just six years from roll-out. Although 5G will undoubtedly bring new opportunities and huge benefits to society, we cannot escape from the requirement that new structures, antennas and ancillary equipment will be needed. But to do so the network needs to be surveyed, designed and planning approval obtained. It has been acknowledged by Government that we must ensure that we have the infrastructure in place to deliver 5G across our major centres and transport networks."*

The introduction of 5G technology will improve the country's digital connectivity and appeal to visitors and businesses alike through the creation of smarter technology which will benefit the British economy.

"Examples of this new world that will emerge from ubiquitous 5G coverage involves such things as connected and autonomous vehicles, traffic management, smart manufacturing with heterogeneous autonomous machines, direct machine to machine communication, advanced medical devices, automated agriculture, far greater security provision, more stable and reliable connectivity and advances in further application development with uses not yet identified. All of the above provides an insight into the future development of connectivity in our modern world and also provides a further insight into the expected minimum eight-fold increase in data usage by each mobile operator over the next 5-6 years."

The national government recognises the importance of the 5G rollout which is a stance taken by government minister Margot James, the NPPF and The National Infrastructure Commission.

"5G has the potential to dramatically transform the way we go about our daily lives, and we want the citizens of the UK to be amongst the first to experience all the opportunities and benefits this new technology will bring...." – Margot James, the government minister for digital).

"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." – NPPF (July 2018)

“Getting 5G deployment right will be critical in a future where connectivity is becoming integral to almost all parts of the economy, and the UK will put its future growth and competitiveness at risk if it falls behind.” – ‘Connected Future’ National Infrastructure Commission 2016

Although Central Government understands that this may present concerns with the various design solutions proposed, it is important that all Local Planning Authorities understand the technical needs of 5G and better understands the wider advantages of such new technology. The government have also expressed support for new telecoms installations and the deployment of new technology. It is seen as essential for the country to develop and exploit the advantages of such new technology to the direct benefit of the public and the economy.

Coverage

The licence granted to EE and H3G demands that strict coverage qualities are met nationwide. It is essential that the benefits of mobile phones are available across the population. Mobile networks are constantly reviewed to ensure that there is adequate coverage and capacity to meet customer demands. In the current environment there is an expectation for signal coverage to be available at home, in the workplace, while shopping, enjoying leisure activities or in transit.

Quality

In order to ensure there is sufficient coverage within buildings such as homes, shops, offices etc. the radio signal has to be of adequate strength to penetrate walls. In urban and suburban areas a dense network of base stations is therefore required, which are sometimes less than 1 km apart. The improvement of 3G and 4G signal and introduction of 5G in this area will encourage economic advancement in accordance with the NPPF which seeks to develop connected environments.

Capacity

The upgrade of telecommunications masts across the country is an inevitable consequence of the continued growth of mobile phone usage. More sites are required to address the increasing traffic demands of each mobile user for tasks such as video or music streaming. Each cell or base station is limited to handling a finite number of calls meaning that areas of high usage will require additional cells to meet network demands and avoid congestion.

The Radio Implication of the Site

Radio signals are transmitted through the network by using fixed links at such frequencies that necessitate an uninterrupted line of sight. To achieve this, the installation must reach a sufficient height above surrounding buildings and trees. The installation must also be in a position to provide strong radio coverage to the target area that can also be received inside buildings.

The radio planning tool identifies deficiencies in the network and predicts the location from which the optimum coverage will be provided. Within these areas existing base stations are selected for an upgrade. The proposed installation subject to this application stems from this process where it is imperative for mobile operators to provide high quality coverage to its customers. This is achieved through the improvement of existing network infrastructure and introduction of new base stations to fill in blank spots.

5. HEALTH AND SAFETY

The proposal for this site has been designed within International Commission on Non-Ionising Radiation Protection (ICNIRP) public exposure guidelines and therefore Health and Safety concerns should not be a planning consideration. An ICNIRP certificate is submitted with this application.

In addition to this, The Institution of Engineering and Technology's *Guide for Local Planning Authorities regarding 5G Masts and Small Cells*, provides a brief overview of 5G technology and the health issues that are often misunderstood. It concludes by saying, *"Small 5G base stations in our towns and cities will allow improved network coverage. They will reduce radio wave exposure to individual smartphone users and improve local 5G capacity for all manner of useful bandwidth-hungry applications. And a good 5G fibre base local broadband infrastructure will be important to local communities over the coming decades in view of the ever-increasing amounts of data being consumed by the general public."*

6. CONCLUSION

A requirement for improved network coverage has been identified in this area. This is an upgrade of an existing site which will provide essential services for residents and businesses within the immediate vicinity. The proposed works have been designed sensitively in consideration for the character and appearance of the surrounding area in which the least amount of works has been proposed to minimise the visual impact of the proposal.

The applicant considers the proposal to be an acceptable development which should be viewed favourably by the local planning authority.