



SUPPLEMENTARY INFORMATION

1. Site Details

Site Name:	Lightbowne Road DNS	Site Address:	Moston Lightbowne Road, Moston, Manchester, M40 0FJ.
National Grid Reference:	E: 388132 N: 402422		
Site Ref:	MAN010/51946	Site Type: ¹	Macro

2. Pre-Application Check List - Site Selection (for New Sites only)

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: No suitable alternatives were identified. Re-use of an existing telecommunications site is the preferred option.		
Were industry site databases checked for suitable sites by the operator:	Yes	No
If no explain why: No suitable alternatives were identified. Re-use of an existing telecommunications site is the preferred option.		

Annual Area Wide Information to local planning authority

Date of information submission to local planning authority	Information not available
Name of Contact:	
Summary of any issues raised:	

Pre-application consultation with local planning authority

Date of written offer of pre-application consultation:	06/10/2021
Was there pre-application contact:	
Date of pre-application contact:	N/A
Name of contact:	
Summary of outcome/Main issues raised: Request for pre-application consultation emailed to the Planning Department, no response received to date.	



Ten Commitments Consultation

Rating of Site under Traffic Light Model:	Amber
The site was rated as amber as although it is the reuse of an existing site, it is in a predominantly residential area with significant green space. Pre-application consultation letters were sent to the following people on 6th October 2021- Councillor Paula Appleby Councillor Julie Connolly Councillor Yasmine Dar Lucy Powell, MP No response received to date.	

School/College

Location of site in relation to school/college (<i>include name of school/college</i>):
The closest educational establishments are St Mary's C of E Primary School, located approximately 200m to the south east and St Matthew's RC High School, approximately 280m NNE.
Outline of consultation carried out with school/college (<i>include evidence of consultation</i>):
As neither establishment is in close proximity, it was considered unnecessary to consult either institution on this occasion.
Summary of outcome/Main issues raised:
N/A

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?		No
Details of response:		

Developer's Notice

Copy of Developer's Notice enclosed?		No
Date served:	FULL PLANNING APPLICATION- Article 13 Notice served.	

3.0 Proposed Development

The proposed site:

The application site is located to the north east of Manchester, in the Moston area. The proposed installation is sited on the pavement on Lightbowne Road as it bisects Broadhurst Park, just south west of the junction with Nuthurst Road. The site in question is approximately 1.05km to the south of the M60 (Manchester Ring Road) and approximately 790m west of the A663 (Broadway). The immediate area is predominantly residential, with schools and community amenities in the wider area. The existing installation has been in situ since 2013 and has been identified by the applicant as requiring upgrade in order to enable the introduction of 5G technologies to the area.

The nearest listed building is the Roman Catholic Church of St Dunstan, Grade II, located approximately 1.1km south west of the proposed development. The mature trees, roads and buildings in between will screen the proposed development from this historic asset. Likewise, Failsworth Lodge, Grade II, approximately 1.3km south east will be unaffected for the same reasons.

The site does not lie within any restrictive land designations, although the proposed development does lie on Lightbowne Road, which bisects Broadhurst Park. However, this road is a busy route, which, in this area is lined with mature trees on both sides of the road. As an existing installation has been in situ for a number of years, this upgrade is not considered to be detrimental to the amenity of this green space.

In addition, the proposed development lies 820m east of Boggart Hole Clough Site of Biological Interest. Due to the nature of the intervening buildings and roads, the current amenity and protected status of this area will not be impacted by the proposed replacement mast.

The nearest residential properties are approximately 65m to the north east on Nuthurst Road, lying on both sides of the junction with Lightbowne Road. These properties will not be afforded direct views of the monopole, due to the mature trees and greenery which line the edges of Broadhurst Park, despite the fact that the new monopole will reach above the tops of these mature trees. Some properties on Moston Lane, approximately 200m east, are afforded views of the top of the monopole, although this is also the case with the existing site. The development will be seen in the context of the surrounding streetscene, meaning that it sits as an accepted part of modern infrastructure and street furniture, now a commonly seen piece of apparatus across the UK. In addition, the monopole and cabinets will be suitably coloured in order to allow them to blend as much as possible into the background.

Full consideration has been given to alternative sites and other existing masts in the vicinity. However, the proposed location and design are considered to provide the optimum solution in this instance, the upgrade of this existing site will enhance the coverage of the existing 2G/3G/4G network and also implement 5G technologies providing enhanced coverage to the public and emergency services alike. The site has to fit into an existing network, this location will allow advancements in capacity and will give the opportunity for further people to work from home as well as support emergency services in receiving real time data, inevitably enhancing 2G/3G/4G communications which is imperative in times of crisis, as shown with the recent COVID-19 pandemic.

Additionally, re-use of an existing site represents the preferred option, as outlined in the NPPF discussed in further detail below.

For the avoidance of doubt, the applicant would like it understood that although this upgrade is being carried out by H3G (UK) Ltd alone, the existing EE (UK) Ltd equipment will be carried over to the replacement site, thus avoiding any unnecessary proliferation of telecommunications equipment in the area.



Aerial view of site.



View of the proposed and existing sites, looking south west along Lightbourne Road.





Planning History

126688/FO/2020

Installation of replacement 20m telecommunications monopole, accommodating 12 no. antenna together with the upgrade of the equipment cabinets and ancillary equipment. Full planning permission granted 15/06/2020.

123901/FO/2019

Installation of a replacement 20m telecommunications monopole, accommodating 12 no. antenna together with the upgrade of the equipment cabinets and ancillary equipment. Full planning permission granted 25/07/2019.

101839/TEL/2013/NI

Determination as to whether prior approval is required for the upgrading of telecommunications equipment, including the installation of a new monopole and two equipment cabinets, following the removal of the existing monopole and two cabinets. Prior approval not required 29/04/2013.

Current Telecommunications Use/ The Future

Since the date of the above decision, mobile operator networks have been under increased pressure to provide up-to-date telecommunications functionality, as mobile phones and mobile broadband use have become increasingly essential to our daily lives. 5G is the next generation of technology to enable increased connectivity with increased data speeds. The growth of digital connectivity over the last decade and the expectations of users have advanced at an unprecedented level. The NPPF recognises that "Advanced high quality and reliable telecommunications infrastructure is essential to economic growth...", as will be considered in more detail below. The current proposal will provide positive benefits to the community which will far outweigh any perceived negative impacts. MBNL have produced an advisory note entitled 5G and Future Technology- Delivering the UK's Telecoms Future and this is enclosed as part of the application.

Enclose map showing the cell centre and adjoining cells:

The proposed development provides a solution to upgrade the existing site. The existing coverage will be maintained and the technology will be upgraded to provide 5G. It is therefore not considered necessary to provide coverage plots in this instance.

Type of Structure (e.g. tower, mast, etc.):

Description: - The upgrading of the telecommunications base station located at Lightbowne Road DNS, Moston Lightbowne Road, Moston, Manchester, M40 0FJ.

The proposed development will include installation of a 20m monopole, 12 no. apertures, 3 no. equipment cabinets, alongside the relocation of 1 no. equipment cabinet and the removal of the existing 14.7m monopole, 2 no. equipment cabinets and development ancillary thereto.

Overall Height: 20m

Height of existing building (where applicable):

N/A

Equipment Housing:

Length:

As per attached drawings

Width:

Height:		
Materials (as applicable):		
Tower/mast etc. – type of material and external colour:	As per attached drawings	
Equipment housing – type of material and external colour:	As per attached drawings	
Reasons for choice of design:		
The mast has been specifically designed for the site in question, taking into account the existing street scene. Whilst the proposed replacement mast is taller than that which already exists, it needs to be in order to introduce the required technologies to the area. It is necessary for the height of the structure to ensure that interference is avoided, to ensure the topography of the landscape does not have an unacceptable impact upon mobile signal quality and that the structure is able to support the 5G antenna and other apparatus. The site needs to be tall enough to satisfy ICNIRP standards, if the height of the mast were to be reduced, it would not provide the levels of coverage and capacity of the existing and emerging networks/technologies. Whilst the monopole will stand above the existing apparatus, the proposal needs to be seen in the context of the overall benefits that will occur from the introduction of 5G technologies to the area. The proposal includes the removal of the existing mast and associated redundant equipment. Furthermore, re-use of an existing telecommunications site will avoid the need for a proliferation of additional telecommunications sites in the immediate area. Ground based equipment has been specifically sited, as to assimilate into the surrounding landscape, set back from the roadside against the grass verge. Ground based equipment has also been positioned, as not to impede upon the visibility splays of road users along Lightbowne Road. The existing 14.7m mast and associated equipment has been in situ for a considerable amount of time without causing any undue harm to its setting. Every effort has been made in relation to the equipment associated with the installation, to keep visual intrusion to a minimum. Consideration has been taken in order to reduce the cumulative impact that a telecommunications installation in this location may have upon the vicinity. Whilst it is acknowledged that there is an increase in the scale of telecommunications development on the site, the location of the monopole is broadly the same. In addition, the proposed site will also be seen in the context of the existing vertical structures, whilst the proposed design is considerably larger than existing street lighting columns and road signage, the height of the proposed apparatus is the minimum capable of providing the technological improvements sought. It should be noted that the new technologies will provide advanced high-quality communications infrastructure essential for economic growth as sought by the NPPF.		

4.0 Technical Information

International Commission on Non-Ionizing Radiation Protection Declaration attached (see below)*	Yes	No
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. 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 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.		
Frequency	To be provided on request	
Modulation characteristics ²	To be provided on request	
Power output (expressed in EIRP in dBW per carrier) In order to minimise interference within its own network and with other radio networks, H3G operates its network in such a way that radio frequency power outputs are kept to the lowest levels commensurate with effective service provision. As part of H3G's network, the radio base station that is the subject of this application will be configured to operate in this way.	To be provided on request	
Height of antenna (m above ground level)	20m	

5.0 Technical Justification

Enclose predictive coverage plots if appropriate, e.g. to show coverage improvement. Proposals to improve capacity will not generally require coverage plots.

The proposed development provides a solution to upgrade the existing site. The existing coverage will be maintained and the technology will be upgraded

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

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

to provide 5G. It is therefore not considered necessary to provide coverage plots in this instance.

Background:

As part of H3G Ltd.'s continued network improvement program they wish to upgrade the existing site to facilitate additional coverage and capacity requirements, incorporating new technologies. Section 10 of the NPPF sets out the Government's general overview regarding supporting high quality communications infrastructure, recognising that advanced, high quality communications infrastructure is essential for sustainable economic growth. In order to keep the number of base stations to a minimum, the use of existing sites is considered to provide the optimum solution and accordingly the proposed site upgrade should be viewed positively. As such, no alternative locations were sought in this instance.

Base stations use radio signals to connect mobile devices and phones to the network, enabling people to send and receive; calls, texts, emails, pictures, web, TV and downloads. Without base stations, mobiles devices and phones will not work.

Many other everyday items also use radio signals to send and receive information, such as television and radio broadcasting equipment and two-way radio communications. Base stations are connected to each other and telephone exchange buildings by cables or wireless technology such as microwave dishes, to create the network. The area each base station covers is called a "cell". Each cell overlaps with its neighbouring cells to create a continuous network. The size and shape of each cell is determined by the features of the surrounding area, such as buildings, trees and hills which can block signals. When people travel between cells, the signal is transferred between base stations without a break in service. Each base station covers a certain area only and can only handle a limited number of calls at once. As mobile phones and devices become more popular, more base stations are needed to ensure continuous coverage.

It is imperative that support is given to the introduction of new infrastructure to allow new technology which will allow networks to be able to handle more data and connect more devices simultaneously at much faster speeds. This will enable places to remain competitive and will support the Government's ambition for the UK to become a world leader in telecommunications technologies and development. Whilst it is acknowledged that there is a significant increase in the scale of telecommunications development on the site, it should be noted that the new technologies will provide advanced high-quality communications infrastructure essential for economic growth as sought by the NPPF. Any perceived negative impacts will be far outweighed by the overall benefits of the scheme and the location of the apparatus on a building which already supports extensive telecommunications equipment will minimise its potential impact on the immediate environment.

All H3G installations are designed to be fully compliant with the public exposure guidelines established by the International Commission on Non-Ionizing Radiation Protection (ICNIRP). These guidelines have the support of UK Government, the European Union and they also have the formal backing of the World Health Organisation. A certificate of ICNIRP compliance will be included within the planning submission.

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 ³	Site Name and address	National Grid Reference	Reason for not choosing ⁴
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If no alternative site options have been investigated, please explain why

The site is an existing telecommunications site which is to be upgraded. Accordingly, alternative sites were not sought in this instance.

³ ETS - Existing Telecomm site, ES - Existing Structure, RT - Roof Top, GF - Greenfield

⁴ SP - Site Provider, RD - Redevelopment Not Possible, T - Technical Difficulties, P – Planning
O – Other



Additional relevant information

Planning Policy Assessment

Section 38 (6) of the Planning and Compulsory Purchase Act 2004 requires planning applications to be determined in accordance with policies of the adopted Statutory Development Plan, unless material considerations indicate otherwise.

National Planning Policy Framework (2021)

The National Planning Policy Framework (NPPF) was published in July 2021 and supersedes previous versions of the document and national planning guidance contained in the various Planning Policy Guidance notes and planning Policy Statements. The NPPF sets out the Government's economic, environmental and social planning policies and how these are to be applied in relation to all planning applications.

Under Section 6 paragraph 81 the NPPF advises.... *"Significant weight should be placed on the need to support economic growth and productivity, taking into account both local business needs and wider opportunities for development."* In terms of supporting a prosperous rural economy paragraph 85... *"The use of previously developed land, and sites that are physically well-related to existing settlements, should be encouraged where suitable opportunities exist."* The proposal seeks the upgrade of an existing telecommunications site, rather than utilising land which has not previously been developed. This approach provides a sustainable solution to the need to upgrade telecommunications services in the area which will benefit not only the local community, but also visitors to the area and potentially reducing the need to travel.

In section 10 of the new NPPF, the document seeks to support *"Advanced, high quality and reliable communications infrastructure"* ensuring that it is *"essential to economic growth and social wellbeing"*. It advises that *"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."* Paragraph 115 states *"the number of radio and electronic communications masts, and the sites for such installations, 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."* The proposal allows for the re-use of an existing telecommunications site which will be upgraded to allow for the introduction of 5G technologies.

Paragraph 116 continues *"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 structures interfering with broadcast and electronic communications services.

The scheme will not cause any undue impact on the services outlined above and fully complies with ICNIRP standards. An ICNIRP certificate is enclosed with the application. The proposal has been designed with the aim of achieving a balance between minimising visual impact and achieving the technical requirements for H3G (UK) Ltd to enhance telecommunications services in the area to the benefit of the local community and visitors to the area. It will make effective use of the land as set out under Section 11 of the NPPF. It is considered the proposed development complies with the broad aims of the NPPF. It assists in the aim to keep the number of installations to a minimum, by utilising an existing site. The equipment has been sympathetically designed, with the pole being kept to the minimum practicable height for the required to accommodate 5G network coverage, thus enhancing the provision of local community facilities and services without detracting from local amenity. More sensitive sites were specifically avoided and re-use of an existing telecommunications site provides the optimum solution in this instance.

Local Plan Policy

The statutory development plan for the area is comprised of Manchester's Local Development Framework Core Strategy, adopted July 2012 and the Extant Unitary Development Policies (UDP).

Manchester's Local Development Framework Core Strategy (adopted July 2012).

Policy EN1: Design Principles and Strategic Character Areas

All development in Manchester will be expected to follow the seven principles of urban design, as identified in national planning guidance and listed above and have regard to the strategic character area in which the development is located. Opportunities for good design to enhance the overall image of the City should be fully realised, particularly on major radial and orbital road and rail routes. Design and Access Statements submitted with proposals for new development must clearly detail how the proposed development addresses the design principles, reinforces and enhances the local character of the part of the City and supports the achievement of the Core Strategy Strategic Objectives...

4. Northern Character Area

The character of this area is significantly affected by the topography, with a marked increase in height moving northwards, cut by the River Irk and its tributaries. There is a finer grained, predominantly residential mix of development, broken up by open spaces and significant tree cover also linked to the local topography.

- Developers should respond to the underlying topography and varied townscape created by the balance between built form and the tree-covered landscape.*

The proposed installation will bring 5G to the area, supporting modern infrastructure and providing the best network connectivity possible across this area of Manchester. It is the stated aim of the Government to roll out 5G networks across the country, in order to future proof our economy. The 5G network is to be the fastest service operators are able to provide. The new technology will enable easy and rapid access to information. The services provided by the mast will benefit the local residential community, local



businesses and amenities. In addition, the expanded connectivity and coverage should aid residents with the anticipated increase in home working following on from the COVID-19 pandemic, as well as allow them the flexibility to easily shift to homeworking and schooling in the event of any future pandemic situation. This anticipated shift towards home working should be encouraged and assisted, as a reduction in commuting will help reduce the community's impact on climate change.

Other options have been considered, however, per the NPPF, the upgrade of an existing site is the preferred option. The site is also to be shared between two operators, so as to avoid unnecessary proliferation of telecommunications equipment in the area. Although the monopole will reach above the tops of nearby buildings and greenery, the slim nature of the design will ensure it has minimal impact, resembling as much as possible the existing street furniture along Lightbowne Road. As the existing site has been in situ without causing harm for a number of years, it is considered that this proposal meets the requirements of this policy.

Extant Unitary Development Policies (UDP)

DC17 Telecommunications

Applications for telecommunications developments will normally be approved if the Council can be satisfied that the development has been sited and designed to minimise its impact on residential amenity and in environmentally sensitive areas. Wherever possible, the Council will expect the potential of existing buildings and mast, including the sharing of such facilities, to be fully explored before agreeing to additional separate development.

The proposed installation will bring 5G to the area, supporting modern infrastructure and providing the best network connectivity possible across this area of Manchester. It is the stated aim of the Government to roll out 5G networks across the country, in order to future proof our economy. The 5G network is to be the fastest service operators are able to provide. The new technology will enable easy and rapid access to information. The services provided by the mast will benefit the local residential community, local businesses and amenities. In addition, the expanded connectivity and coverage should aid residents with the anticipated increase in home working following on from the COVID-19 pandemic, as well as allow them the flexibility to easily shift to homeworking and schooling in the event of any future pandemic situation. This anticipated shift towards home working should be encouraged and assisted, as a reduction in commuting will help reduce the community's impact on climate change.

Other options have been considered, however, per the NPPF, the upgrade of an existing site is the preferred option. The site has been designed so that the upgraded equipment resembles as much as possible (within technical constraints) the existing equipment. As there has been telecommunications equipment on this rooftop for a number of years without causing harm, it is considered that the design of the equipment and the site complies with this policy.

The introduction of high-speed 5G technologies to this part of Manchester will enable the area to be future-proofed, ensuring that communities and businesses are able to be sufficiently agile to respond to the changing nature of our society and world. Improvements in connectivity and capacity will enable more people to work flexibly from home and benefit from high-speed downloads



CONCLUSION

There is a requirement for H3G to provide advanced telecommunications technologies to this industrial/commercial area of Manchester. 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 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.

Contact Details

Name (agent)	Helen Bolam Beacon Communications Services Ltd.	Telephone	07980739597
Operators	H3G (UK) Ltd	Fax no	N/a
Address	10 Sovereign Park Cleveland Way Hemel Hempstead HP2 7DA	Email address	helen.bolam@beacon comms.co.uk
Signed	<i>Helen K Bolam</i>	Date	23rd December 2021
Position	Planning Consultant	Company	For and on behalf of H3G (UK) Ltd