SUPPLEMENTARY INFORMATION

1. Site Details

Site Name:	Strathclyde Police 194776	Site Address:	Strathclyde Police 6 Baird Street Glasgow Scotland G4 0EZ
National Grid Reference:	E260107, N666309		
Site Ref Number:	22753	Site Type:[1]	Macro

2. Pre-Application Check List

Site Selection

Was a local planning authority mast register available to check for suitable sites by the operator or the local planning authority?		No
If no explain why: No register available.		
Were industry site databases checked for suitable sites by the operator:	Yes	
If no explain why: The industry site databases were checked. However, as this proposal involves the upgrading of an existing telecommunications installation, this site is the optimum technical solution to provide 5G coverage to the local and surrounding area.		

Site Specific Pre-application consultation with local planning authority

Was there pre-application contact:	Yes
Date of pre-application contact:	10/5/2021
Name of contact:	
Summary of outcome/Main issues raised: A pre-application consultation letter was issued to Glasgow City Council on 10th May 2021. This letter contained details of the proposed upgrade at this existing telecommunications site, as well as design drawings. Feedback was requested from the Council. As of the date of this planning submission, no formal response has been received from the LPA.	

[1] Macro or Micro

Community Consultation

Rating of Site under Traffic Light Model:			Green
Outline of consultation carried out: A pre-application consultation letter was issued to the local Ward Councillors of the Dennistoun Ward. Detailed design drawings of the proposal were provided alongside the consultation letter and feedback was requested.			
Summary of outcome/main issues raised (include copies of relevant correspondence): As of the date of this planning submission, no formal response has been received from the Ward Councillors.			

School/College

Location of site in relation to school/college (include name of school/college): As there are no schools or colleges within 250 metres, it was not considered necessary to issue pre-application consultation letters as part of this exercise.
Outline of consultation carried out with school/college (include evidence of consultation): N/A
Summary of outcome/main issues raised (include copies of main correspondence): N/A

Civil Aviation Authority/Secretary of State for Defence/Aerodrome Operator consultation

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: As the application site does not lie within 3km of an aerodrome, then no notification is necessary.		

Developer's Notice

Copy of Developer's Notice enclosed?		No
Date served:	N/A – Full Planning Application	

3. Proposed Development

The proposed site:
The site currently accommodates existing and well-established telecommunications equipment on the building rooftop, and has done for over 17 years. The first application available to view on the Council's Planning Portal proposed the Installation of telecommunication antennas and associated equipment for O2 (LPA Ref: 03/00766/DC). There are no documents associated with this application. However, the Local Authority granted planning permission for the development in May 2003. As there are no drawings for this application on the Council's Planning Portal, it is difficult to ascertain whether the O2 base station was the first in situ, or if it was installed alongside an existing EE or H3G base station. In June 2010 an application was submitted to the Local Authority to upgrade the O2 base station (LPA Ref: 10/01604/DC). The Local Authority granted planning permission in August 2010. The planning drawings accompanying that application not only showed the existing, and proposed, O2 installation, but also existing H3G apparatus. There is no evidence available on the Council's Planning Portal that confirms when the H3G apparatus was initially installed, but it clearly pre-dates June 2010. The scheme before the Council proposes to upgrade the existing EE and H3G base station, with the removal of three pole-mounted antennas, and the installation of three specially-designed rooftop tripods, each of which will accommodate two antenna apertures. Also proposed are two pole-mounted transmission dishes, as well as seven equipment cabinets. The upgraded base station will provide enhanced 2G, 3G, 4G services, as well brand-new 5G coverage for two mobile Operators, to the local area. The design, and the positioning, of the proposed scheme has been brought forward to ensure that its visual impact is reduced as far as practicable. Two tripods are proposed to the north-end of the building. The presence of the existing Vodafone stub-tower on the building plantroom somewhat dictates the positioning of the proposed MBNL apparatus towards the roof-edge. Additionally, positioning the proposed apparatus on the roof edge ensures that the smallest level of equipment can be deployed – as the signal from these antennas will not be subjected to 'clipping'. The apparatus proposed on the north-end of the building rooftop will not result in an increase in overall building height, as it will remain lower than the existing Vodafone telecommunications stub tower. One tripod is proposed to the south-end of the building. As can be seen from the accompanying planning drawings, the top height of these antennas (18.95m), is still significantly lower than the building plantroom (21.25m). As such, it is not considered that the apparatus at the south-end of the building will have any visual impact on the host building or the skyline. The plantroom will provide an excellent backdrop to this element of the proposal, as well as screening views from the north, east, and west. It is considered that the proposed equipment is acceptable and that the location of the equipment on the rooftop will be situated in the most suitable position to ensure public views are reduced as far as practicable. As outlined above, the proposed scheme will still be on a lower elevation than the existing telecommunications apparatus on the building's plantroom. As such, the overall height of the building will not be increased, with no additional impact on the building's skyline. The current telecommunications base stations, for MBNL and Vodafone, and all of their previous incarnations, have become accepted features within the local environment. It is anticipated that

the upgrading of this base station will be no different. It is therefore considered that this development will have no significant negative impact on the visual amenity of the host building, or the surrounding area.

The building itself sits within close proximity to the M8 motorway, its associated slip-roads, and a wide-ranging road network. These roads are lined with tall streetlighting columns which provide vertical engineered elements within the local skyline, and will allow the proposed apparatus to assimilate into the area with ease. It may also be expected that, given the building is a well-known Police Headquarters, the type of apparatus proposed is exactly the type of apparatus that may be expected to be installed on such a building. Given the buildings remoteness, in relation to residential properties, it is anticipated that the upgrading of this site will have no impact on any residential amenity within the local area.

The proposed development will allow the provision of new 5G coverage to the wider area. It is not anticipated that there will be any significant negative visual impact associated with this proposal, given that the actual installation of equipment will not increase the overall height of the building. Given the provision of new cutting-edge (5G) technology which will be available to the wider community, it is considered that the upgrading of this established telecommunications site offers the optimum solution in terms of both town planning and network requirements. As such, it is anticipated that Council support will be forthcoming.

Type of Structure *(e.g. tower, mast, etc):*	
Description: The installation of 3no rooftop tripods accommodating 6no antenna apertures (2no antenna apertures per tripod), with a top height of 23.45m; 2no pole-mounted transmission dishes; and the installation of 7no equipment cabinets; plus ancillary development thereto. As part of this proposal, 3no existing pole-mounted antennas, and their supports, will be removed.	
Overall height of proposed development:	23.45 metres
Overall height of existing telecommunications apparatus on building rooftop:	23.90 metres
Equipment Housing:	
Length:	2310mm
Width:	770mm
Height:	770mm
Materials *(as applicable):*	
Tower/mast etc – type of material and external colour:	Tripods – Galvanised steel
Equipment housing – type of material and external colour:	Steel – Galvanised (unless otherwise suggested by the LPA)

Reasons for choice of design, making reference to pre-application responses:

In designing the proposed upgraded installation, the applicant has sought to achieve a balance between the technical requirements of the Operators and minimising environmental impact as far as was practicable. It, however, must be acknowledged that technical constraints heavily influenced the design and limited the scope to alter the appearance of the site to a significant degree.

There are three main elements to a radio base station; the cabin or cabinets which contain the equipment used to generate the radio signals, the supporting structure that holds the antennas in the air or fixes them to a building or structure and the antennas themselves, which emit the radio signals (along with any necessary amplifier or receiver units). Other elements necessary for the base station to function are the links into the network either by fibre cabling or by dish antennas, power source (meter cabinet or generator where a REC supply cannot be utilised), feeder cables that link the equipment housing to the antennas and the various support structures, grillages and fixings, often referred to in general terms as “development ancillary to” the base station.

The application proposes to replace the existing pole-mounted antennas which sit on the rooftop of the Strathclyde Police Station on Baird Street. The upgrading of this base station would provide improved 2G, 3G, and 4G coverage as well as new 5G coverage for two major mobile operators. This will ensure that the surrounding area will be at the forefront of the next advance in technology being deployed.

The proposed equipment upgrade is required to enable the provision of brand-new, cutting-edge 5G coverage. The rooftop currently accommodates three MBNL pole-mounted antennas, as well as a telecommunications stub tower for Vodafone. The rooftop is therefore synonymous with telecommunications apparatus. The top height of the proposed apparatus is 23.45m above ground level. The proposed upgrade will see the deployment of three tripods on the rooftop – two on the north-end of the building, and one on the south. However, the deployment of this equipment will <u>not</u> result in an overall height increase of the building, as the existing Vodafone stub tower will remain the apparatus with the highest elevation (23.90m).

The proposed upgrade would result in the removal of the existing MBNL antennas, and the installation of more modern apparatus, providing improved connectivity and capacity within the local area, for both EE and H3G. The proposed upgrading of the base station would result in the deployment of three specially-designed rooftop tripods. These tripods are more robust than the existing support poles, and are therefore able to accommodate larger, and heavier, apparatus. These tripods will assist in future-proofing the base station, thereby allowing the easy upgrading (and removal) of equipment when the next generation of technology (6G/7G etc) is eventually rolled-out. The proposed development is considered to offer the best option from an environmental and town planning perspective, whilst simultaneously achieving the technical requirements associated with a base station upgrade.

The accompanying document, titled ‘*5G and Future Technology*’, provides more detailed information on 5G rooftop installations and the need for antennas to sit above the existing rooftops to ensure there is no ‘clipping’, as well as on the edge of building rooftops. The positioning of the proposed tripods will ensure that the maximum antenna height is achieved, with the result being the most optimal technical solution on the rooftop, and within the wider area.

As this location already accommodates apparatus for other Operators, as well as MBNL, then this location has already been assessed by the Council as being acceptable. Furthermore, taller

equipment than that which is proposed as part of this application is currently in situ. Given that this upgrade will significantly improve capacity and connectivity within the area for EE and H3G, it is expected that this application will be supported by the Council. The existing telecommunications base stations for both MBNL and Vodafone have become an accepted part of the built environment. It is anticipated that this will continue, post-upgrade, and that the proposed scheme will assimilate onto the rooftop, and into the wider streetscene, with ease.

The site is situated within an urban environment, and therefore it is not anticipated that the upgraded installation will look incongruous across the wider environment. The upgrading of this existing and established telecommunications site is seen as the optimal solution in terms of both town planning and achieving the maximum level of enhanced network coverage. The site has been specifically selected to ensure the impact of the development is kept to an acceptable level and minimised as far as practicable. The additional impact of the development would be outweighed by the significant economic, social and environmental benefits of the proposal. The building's plantroom will assist in providing screening, or a backdrop, to the proposed apparatus, thereby reducing its visual impact through the filtering of public views.

It is considered, overall, that the design is appropriate to the site and surrounding area and avoids any unacceptable level of impact, as well as the deployment of an additional base station within the local area.

Technical Information

International Commission on Non-Ionizing Radiation Protection Declaration attached (see below) International Commission on Non-Ionizing Radiation Protection public compliance is determined by mathematical calculation and implemented by careful location of antennas, access restrictions and/or barriers and signage as necessary. Members of the public cannot unknowingly enter areas close to the antennas where exposure may exceed the relevant guidelines. When determining compliance, the emissions from all mobile phone network operators on or near to the site are taken into account. In order to minimise interference within its own network and with other radio networks, EE Ltd and H3G UK Ltd operates its network in such a way the radio frequency power outputs are kept to the lowest levels commensurate with effective service provision As part of EE Ltd and H3G 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, 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.	**Yes**	

4. Technical Justification

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

The development is required to provide improved connectivity and network enhancement to EE and H3G in the area. As noted above, apart from providing improved 2G, 3G and 4G coverage, brand-new 5G coverage will be deployed from the site, ensuring the surrounding area benefits from the latest technology.

High-quality communications infrastructure is essential for sustainable economic growth. High-speed broadband technology and other communications networks can play a vital role in enhancing the provision of local community facilities and services. Furthermore, mobile telecommunications are vital for the UK's economic competitiveness and in promoting social inclusion. The very high level of mobile phone use and ownership within the UK population is a very clear indication of the public's overwhelming acceptance of the benefits of mobile communications, which requires the installation and maintenance of base stations to provide the necessary connection between the mobile phones and the UK telecommunications network.

One of numerous benefits of this, on a wider scale, is that this allows for an increase in home working, by providing the opportunity to create a "virtual office", reducing in the need to travel for work as a consequence, which is helpful in supporting the sustainable development agenda.

Given the current situation in which the country finds itself, with a significant percentage of the country's workforce now displaced into working from home, the demand on the existing networks is at its peak. At the time of writing, our dependence on network services and connectivity is ever more apparent. Restrictions on travel resulting from the Coronavirus pandemic, combined with a third national lockdown, have resulted in a massive shift from office-based to home working, from physical, professional and social gatherings to virtual ones, and to unprecedented reliance on online shopping and entertainment services. Data usage within suburbs has increased dramatically as less people are travelling to town and city centres. Maintaining and enhancing the mobile networks is of vital national importance, and it is significant that telecoms has been designated as "critical work" during this time. It is anticipated that the current shift towards homeworking and online services will persist, to a lesser degree, in the future. It is vital that the infrastructure is in place throughout the UK to meet this demand.

The Ofcom Connected Nations 2020 UK Report outlines a sharp increase in both mobile and voice data, particularly during the enforced national lockdowns of 2020. The report states that average call volumes and average call duration increased in the week that national lockdown was introduced in March 2020, with mobile hotspots shifting away from city centres to the suburbs and residential areas as restrictions continued.

Significantly, the same report states that the consumption of mobile data saw a staggering rise of 42%, when compared with the previous year. Additionally, the traffic carried in England in June 2020 (during lockdown) exceeded that carried across the whole of the UK (England, Scotland, Wales, and Northern Ireland) in February 2020 (prior to lockdown).

In his speech at Connected Britain 2020 , in September 2020, Digital Infrastructure Minister, Matt Warman, stated the following:

"COVID has altered the way we live, work and, most importantly, stay connected with our family and friends. The digital infrastructure that keeps us all connected was essential to our daily way of

life under lockdown - and is now more important than ever as we head into recovery. Many of these changes - such as increased working from home - will stay with us for the foreseeable future".

The implementation of a third national lockdown in January, February, March and April 2021 has seen a return of most aspects of life associated with the two previous lockdowns, and the same increases in voice calls and mobile data consumption is expected. Mr Warman also stated the following:

"The world is in the middle of a digital revolution. COVID has accelerated this process, digitising almost every part of our everyday lives and making the infrastructure that connects us more important than ever. That's why it is at the top of the government's agenda".

Central Governments' direction of travel is to support the roll-out of 5G technology and this was the case pre-pandemic. Since its initial roll-out in 2019, Operators have continued to deploy 5G across the UK, largely via the upgrading of existing base stations. Around 3,000 base stations now carry 5G technology. Mr Warman also confirmed that legislative reforms were being undertaken to make it easier for Operators to deploy and upgrade telecommunications base stations.

Notwithstanding the Covid-19 pandemic, and the increase in network reliance, a look at past data shows that our reliance on mobile networks was increasing year-on-year, prior to 2020. Ofcom's Communications Market Report 2018 provides a figure of 92 million active mobile subscribers in the UK at the end of 2017. It details that 78% of adults now use a smartphone and that 76% of mobile users are using their devices for web and data access. Figures within the report also confirm that users are spending an increasing amount of time per day using their mobile phone. 68% of participants in the Touchpoints research reported that they "could not live without" their mobile phone (rising to 78% among 25-34s). Whilst not included within the research figures, anecdotal evidence suggests that this number is greater still amongst those aged under 18. All of which points towards the nation's increasing dependency on mobile services and connectivity.

As recognised by the London Assembly's Regeneration Committee within its "Digital Connectivity in London" report, published June 2017, digital connectivity is now widely regarded as the "'*fourth utility', an everyday necessity alongside water, gas and electricity*" and also noted that "*mobile broadband is, and will continue to be, an essential complement of fixed broadband*". It is no longer a luxury, but a service essential to modern life.

As introduced above in Section 3 of this document, the objective of this site is to ensure 5G coverage is provided to the surrounding area for EE and H3G.

The upgrading of this existing base station will enable enhanced 2G, 3G and 4G services.

2G was the second generation of mobile phone transmission, it introduced data services for mobile, starting with SMS text messages.

3G was an extension to this and enabled the use of data. The main technological difference that distinguishes it from 2G technology is the use of packet-switching rather than circuit-switching for data transmission. Increased data rate to a minimum of 2 Mbit/s for stationary or walking users, and 384 Kbit/s in a moving vehicle.

Similarly, 4G was another extension and enabled an increased speed in connection. It supports a minimum data rate of 1 Gbit/s for stationary and 100 Mbit/s for mobile operation. In simple terms, the benefit to users is that 4G supports mixed data, voice, video and messaging traffic at

significantly faster speeds than 3G. This results in ultra-fast internet browsing, video streaming, gaming, e-mail and downloads.

As already outlined within this application, the proposed upgrading of this base station will allow 5G services to be provided from this site. On a wider scale, the proposal would contribute towards the country's connectivity and digital economy future – an aim outlined within the Digital Scotland – Forging Our Digital Future with 5G, which states that *"the Scottish Government's aspiration is for Scotland to be at the forefront of this revolution, and, ultimately, to establish the whole country as a leading 5G digital nation"*.

Ofcom's 2018 Communications Market Research Report shows that smartphones are owned by four of every five UK consumers and smart TVs are in almost half of all households. Demand for data continues to grow rapidly for UK consumers, with 1.9GB consumed by an average mobile subscription per month in 2017, (up from 1.3 GB the previous year). The report found that more than seven in ten now use their mobile to access the internet, sufficient coverage is obviously vital for this basic utilities service to be provided.

The UK Government, recognising the benefits to commerce, industry and the public in general, places great emphasis on the benefits of mobile telecommunications to modern life. This position was reinforced by a statement made by then Prime Minister David Cameron in March 2016 when he specifically addressed the vital importance of mobile connectivity for residents and local economies and highlighted that the urgent delivery of the required network improvements is a Government priority;

"*Ten years ago, we were all rather guilty of leading campaigns against masts and all the rest of it. Our constituents now want internet and mobile phone coverage. We need to make sure that we change the law in all the ways necessary, that the wayleaves are granted, that the masts are built, that we increase coverage and that everyone is connected to the information superhighway. This is substantiated in the most recent budget announcement of 16th March 2016, which commits to provisions for "greater freedoms and flexibilities for the deployment of mobile infrastructure*".

Since 2016, and particularly during the enforced lockdown of 2020 and 2021, public and business reliance on the established mobile networks has continued to increase. Improved mobile coverage and connectivity is now no longer viewed as a 'luxury', but rather an every-day necessity. This has been further exacerbated as, at the time of writing, the country is currently ensconced in a third national lockdown in the space of 12 months. It is imperative that connectivity and capacity is continuous – to allow home-working, home-schooling, online grocery shopping, and video-calling friends and family that we cannot physically visit. Our reliance on these established networks is at an unprecedented level and it must therefore be ensured that coverage is not only continued, but also improved – i.e. with the provision of brand-new 5G technology.

Further details of the new 5G technology is included within this application in the form of the 5G and Future Technology document.

5. Site Selection Process

Alternative sites considered and not chosen

Site Type	Site name and address	National Grid Reference	Reason for not choosing site
N/A	N/A	N/A	N/A

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

N/A

In assessing applications for developments, paragraph 295 of the SPP confirms that mast or site sharing is encouraged, as is the installation of equipment on buildings or other existing structures. As both of these objectives are achieved as part of this proposal, it is considered that there is no better available environmental and town planning option than the one brought before the Council.

This proposal is for the upgrading of an established telecommunications site to provide brand-new 5G coverage and not for the development of a brand-new site. The application site, therefore, represents the only feasible option in this instance which allows the requirement to be met without the deployment of an additional base station in the locality.

As the proposed development will upgrade an existing and established base station, the result is no net increase of telecommunications sites within the area. This wholly accords with national planning guidance.

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

It is considered that the proposed location is the least visually intrusive site and design available to the applicant to ensure that the existing base station is upgraded to modern standards and capable of providing 5G coverage. The site is an existing and established communications installation situated on the rooftop of 6 Baird Street. During modern times, this location has become synonymous with telecoms installations as the rooftop has accommodated apparatus for two separate Operators for circa 17 years. Over this period, this equipment has been upgraded and added to, where necessary, to provide an improved level of mobile service to the local community and the surrounding area – moving from 2G to 3G to 4G over this period of time. The proposed upgrading of this site is the next step in technological progression. The current installations on the rooftop are not seen as a prominent or incongruous developments and it is not anticipated that the upgraded installation will be seen as such. As part of this upgrade, like previous upgrades undertaken at the application site, redundant equipment and steelwork will be removed to ensure that the visual amenity of the building is not unnecessarily impacted.

For operational reasons, it is imperative that the antennas sit above the rooftop and therefore network signals are not obscured or blocked. As discussed previously, the tripods will be deployed on the roof-edge to ensure that the smallest level of equipment is deployed. Despite the isolated height increases in the three locations where the tripods are proposed, the overall

height of the building will not be increased. Given the presence of the rooftop plantroom, and the screening and/or backdrop that it provides, the proposal is considered to be acceptable, when the public benefits of improved connectivity and capacity are weighed against any perceived visual impact.

The upgraded installation would provide enhanced coverage for two Operators and for multiple technologies – 2G, 3G, 4G and new 5G coverage would be provided for EE and H3G. This accounts for the increase in scale of equipment required. An alternative would be to either propose separate installations for the two Operators (i.e. two new ground-based masts or two new rooftop base stations) or an additional installation for the new technology (i.e. one new ground-based mast or new rooftop base station providing 5G coverage). Proposing an upgrading of the existing base station assists in keeping the overall number of installations to a minimum (i.e. no net gain of telecommunications sites), and therefore also keeping the overall visual impact of development to a minimum.

In this case, it is suggested that the application of the balancing method advocated in the NPF3, for the provision of communications and connectivity services, in the public interest, be utilised to balance the need for continued connectivity with the potential impact of the site. It is considered that when this balance test is applied to the proposal, where the need and significant public benefit is balanced against the appearance and level of associated visual impact of the proposed site, that the application proposal is positively in favour and is considered wholly appropriate.

The proposal has been designed specifically to achieve a balance between meeting the technical requirement of the operators and avoiding harm to the site or the surrounding area. It is considered that this location offers the optimum location in terms of siting and design, with no significant impact on the surrounding area likely to be caused as a consequence of the proposed development. As such, equilibrium will be achieved between technical requirements and environmental impact. The provision of enhanced services to the area is in the public interest and there is no justification for this proposal not to receive Council support.

Planning Policy Context:

National Planning Policy Guidance

The Scottish Government series of Planning and Architecture documents are material considerations in the planning system. The Scottish Government's policy on nationally important land-use planning matters is identified in Scottish Planning Policy 2014. The National Planning Framework 3 (NPF3) is the Governments current strategy for Scotland's long-term spatial development.

The SPP and NPF3 are pro-development with a *'presumption in favour of development that contributes to sustainable development'* being seen as a golden thread, running through both plan-making and decision-taking.

The thrust of this guidance is positive and a reminder to Local Authorities that we need to build the requisite infrastructure to enable economic growth.

It is not necessary to quote extensively from this document but the following points are highlighted.

National Planning Framework 3 (2014)

The NPF3 was adopted in June 2014. It identifies a vision for Scotland to create a sustainable, low carbon, connected, natural, resilient and successful place (Paragraph 1.2).

The Government's latest thinking strongly supports digital infrastructure and the need to ensure that cities are better connected, providing a gateway to the rest of the world. Paragraph 5.16 identifies that cities are expected to become 'smarter' in the future and will use shared infrastructure and population density to further increase access to high performing digital services. Through strengthening digital infrastructure, the aspirations for more sustainable cities and subsequently attracting new business will be supported. Furthermore, NPF3 highlights the significance of improving digital infrastructure to support sustainable economic growth and ensure people and communities are better connected (Paragraph 5.25).

The following paragraphs are of significance:

Para 5.8 – "Connectivity is not just about enabling physical movement, but also virtual links. High quality mobile and fixed broadband connections have become essential to support communities and business development in both rural and urban areas. At present, there remains a significant gap between our most and least connected areas, with digital access being considerably better in more accessible urban areas. Many parts of rural Scotland have little or no connection and require public investment to rebalance the distribution of infrastructure".

Para 5.9 – "Our Infrastructure Investment Plan aims to accelerate the roll out of next generation broadband to all parts of rural Scotland over the next five years, to support public service provision as well as investment in the digital economy and rural economic growth. Work is progressing to develop new fibre links connecting rural areas, with an expectation of fibre links to 95% of premises Scotland wide by 2017/18. Opportunities for smarter towns and cities are also being explored".

Para 5.15 – "To further reduce the need to travel and ensure continuing economic competitiveness, we will see a step change in digital connectivity in the coming years, supporting our broader aspirations for growth across the country. This will require significant investment in digital infrastructure to ensure coverage extends to our most remote, but asset-rich, rural and island communities. As well as providing new infrastructure to connect existing areas, future developments will build in digital connectivity as a matter of course. We are extending permitted development rights to facilitate this".

Para 5.16 – "Strengthened digital infrastructure will support our aspirations for more sustainable cities which attract new business. We can expect cities to become significantly 'smarter' in the next few years, using population density and shared infrastructure to further increase access to high performing digital services".

Para 5.29 – "Our plans for investment in digital infrastructure will play a key role in improving competitiveness, ensuring that there is no digital divide between rural and urban Scotland. Our 'Digital Scotland Superfast Broadband Programme' is delivering £410 million of public and private investment in parts of Scotland, including rural, semi-rural and suburban areas, that would not otherwise be served commercially. We are also exploring delivery models to extend mobile services to some of our hardest to reach areas".

Para 5.35 – "Improved digital infrastructure, both fixed and mobile, is essential to support sustainable economic growth and better connect people and communities. We have identified a digital fibre network linking our most peripheral communities as a national development. This will bring particular benefits in the north and west coasts and islands, given their relatively dispersed population and the potential to support population and economic growth through increased home and remote working".

Scottish Planning Policy 2014 (SPP)

Scottish Planning Policy published June 2014, is a statement of Scottish Government policy on how nationally-important land-use planning matters should be addressed across the country. SPP is supplemented by a series of Planning Advice Notes (PANs).

Paragraphs 292 – 300 of the SPP relate specifically to Supporting Digital Connectivity, including telecommunications developments. It highlights the importance of our digital infrastructure, across the whole of Scotland, including urban and rural areas and confirms that Scotland's economy and social networks depend heavily on high-quality digital infrastructure. To facilitate investment across Scotland, planning has an important role to play in strengthening digital communications capacity and coverage across Scotland.

The proposed development accords with all these aspects of the NPF3 and SPP in that it will provide EE and H3G, with improved 2G, 3G and 4G connectivity and capacity, as well as brand new 5G network coverage within this area of Glasgow. The public benefits brought forward as part of this upgrade are significant and numerous.

Paragraph 295 of the SPP confirms that "*Local development plans should provide a consistent basis for decision-making by setting out the criteria which will be applied when determining planning applications for communications equipment. They should ensure that the following options are considered when selecting sites and designing base stations:*

- *mast or site sharing;*
- *installation on buildings or other existing structures;*
- *installing the smallest suitable equipment, commensurate with technological requirements;*
- *concealing or disguising masts, antennas, equipment housing and cable runs using design and camouflage techniques where appropriate; and*
- *installation of ground-based masts".*

Paragraph 296 confirms that "*Local development plans should set out the matters to be addressed in planning applications for specific developments, including:*

- *an explanation of how the proposed equipment fits into the wider network;*
- *a description of the siting options (primarily for new sites) and design options which satisfy operational requirements, alternatives considered, and the reasons for the chosen solution;*
- *details of the design, including height, materials and all components of the proposal;*
- *details of any proposed landscaping and screen planting, where appropriate;*
- *an assessment of the cumulative effects of the proposed development in combination with existing equipment in the area;*
- *a declaration that the equipment and installation is designed to be in full compliance with the appropriate ICNIRP guidelines for public exposure to radiofrequency radiation*

(The radiofrequency public exposure guidelines of the International Commission on Non-Ionising Radiation Protection, as expressed in EU Council recommendation 1999/519/ EC on the limitation of exposure of the general public to electromagnetic fields.); and

- *an assessment of visual impact, if relevant".*

It is considered that the applicant has addressed all matters set out in the 'model' telecommunications policy.

In assessing applications for developments, paragraph 298 of SPP confirms that *"Consideration should be given to how proposals for infrastructure to deliver new services or infrastructure to improve existing services will contribute to fulfilling the objectives for digital connectivity set out in the Scottish Government's World Class 2020 document".*

Paragraph 299 of SPP states: *"All components of equipment should be considered together and designed and positioned as sensitively as possible, though technical requirements and constraints may limit the possibilities. Developments should not physically obstruct aerodrome operations, technical sites or existing transmitter/receiver facilities. The cumulative visual effects of equipment should be taken into account".*

Paragraph 300 of SPP states "*Planning authorities should not question the need for the service to be provided nor seek to prevent competition between operators. The planning system should not be used to secure objectives that are more properly achieved under other legislation. Emissions of_radiofrequency radiation are controlled and regulated under other legislation and it is therefore not necessary for planning authorities to treat radiofrequency radiation as a material consideration".*

In order for the UK to benefit from the huge potential of 5G, Local Planning Authorities will have to weigh the Public Benefits of such connectivity with the requirements to instruct and manage the built environment. Central Government understands that this may present concerns with the various design solutions proposed but it is important that all Local Planning Authorities understand the technical needs of 5G and better understands the wider advantages of such new technology. This is further emphasised within the National Infrastructure Commission's report in 2016, where National Digital Strategy will be directed through the Economy and Industrial Strategy Cabinet Committee in order to:

"Support and challenge local government in their plans to enable the delivery of digital infrastructure; both in terms of ensuring that these plans help the UK to meet its national objectives, and that local authorities develop consistent approaches to support the deployment of mobile infrastructure across the country". ('Connected Future' – National Infrastructure Commission 2016).

Planning Advice Note: PAN 62 Radio Telecommunications

PAN 62 refers to Radio Telecommunications and states that the NPPG considers the general siting and design principles for telecommunications. It states that such development should be undertaken in a manner that minimises environmental impact and should have a sensitive design in both urban and rural areas.

Paragraph 32 identifies two components associated with minimising the contrast between telecommunication equipment and its surroundings; '*minimising contrast between equipment and people's expectations of a particular scene'* and *'minimising the contrast between*

equipment and its immediate setting or background'. For example, a lattice mast generally fits expectations about industrial landscapes and fitting antennas to an electricity pylon or painting antennas to match the façade of a building can reduce contrast.

Paragraph 33 identifies ways in which to minimise this contrast. These are as follows:

- *select a shape and material appropriate to the character of the area;*
- *keep the shape simple with clean lines, and fit all the elements, such as antennas, cables and ladders within the visual envelope of the basic shape;*
- *develop a composition where the properties seem in proportion and balanced, for example masts that taper to the top are usually more acceptable;*
- *minimise the number of separate visual elements in a base station; and*
- *use regularity, order and symmetry in positioning equipment*

Furthermore, paragraph 34 identifies a series of options that should be considered as a guide for selecting the site and design of telecommunications that minimise contrast operators. The implementation of telecommunications is site-specific and therefore should be considered against the site conditions and coverage and capacity requirements in addition to technical constraints and landscape character. The options are;

- *installing small scale equipment;*
- *concealing or disguising equipment;*
- *mast sharing;*
- *site sharing;*
- *installing on existing buildings or other structures; and*
- *erecting a new ground based mast.*

National Infrastructure Delivery Plan 2016 – 2021 (2016)

Central Government's Infrastructure and Projects Authority who report to HM Treasury and Cabinet Office have produced a national plan that aims to improve the planning and delivery of infrastructure-based projects and in turn will help to increase investment in the UK and accelerate achieving.

Chapter 7 relates to Digital Communications in which it is said in paragraph 7.1 that *"Digital communications are now a crucial component of everyday life. Technologies such as mobile phones and broadband have revolutionised the way we work, socialise and enjoy our leisure time. Improvements in connectivity mean the UK is rapidly embracing a vibrant digital economy, currently worth around £120 billion a year. Over 30% of UK premises have taken up superfast broadband and there are more than 23 million 4G subscriptions".*

It then goes on to state in paragraph 7.2 that *"Reliable and high quality fixed and mobile broadband connections support growth in productivity, efficiency and labour force participation across the whole economy. They enable new and more efficient business processes, open-up access to new markets and support more flexible working practices".*

It is also recognised in paragraph 7.4 that *"Demand for digital services and applications will continue to rise rapidly, with a consequent acceleration in the amount of data being carried over networks. Over the next decade we can expect the emergence of new services, applications and devices which will create additional demands on networks. To support this*

demand, the UK needs infrastructure that is high capacity, reliable, resilient, secure, affordable and fast".

It is acknowledged in paragraph 7.10 that *"The government will work to provide greater freedoms and flexibilities for the deployment of mobile infrastructure, including reducing planning restrictions for existing telecoms infrastructure and allowing taller new ground-based masts to be built".*

The National Infrastructure Delivery Plan details key projects and programmes including voice coverage to 90% of the UK geographic area by the end of 2017. With regards 4G rollout it is said that by 2017, 98% of premises should have access to 4G mobile broadband.

Development Plan Policy:

The Development Plan for the Glasgow City Council area, relevant to this proposal, consists of:

- The Glasgow City Development Plan (adopted March 2017);
- Glasgow and Clyde Valley Strategic Development Plan (Clydeplan) (adopted July 2017);
- City Development Plan 2017 – IPG3: (SG3) Economic Development – Interim Planning Guidance (adopted February 2017).

<u>Glasgow City Development Plan (adopted March 2017)</u>

The Glasgow City Development Plan states outlines the City's aim to become *"A Connected Place"*. One important element in securing this reality is to *"support the development of digital connections to allow mobile working and local business to flourish"*.

Page 46 of the City Development Plan offers the following:

> *"A key priority of the Plan is to maintain the attractiveness of the City Centre as an investment location. It is important to provide the physical and digital infrastructure that will attract investors to Glasgow in preference to competitor cities".*

<u>Glasgow and Clyde Valley Strategic Development Plan (Clydeplan)</u>

There are no relevant telecommunications policies contained within this document. As such, greater weight should be given to the NPF3, SPP, PAN62, and the National Infrastructure Plan 2016 – 2021, all of which are supportive of improving telecommunications networks; encourage the use of existing base stations; the sharing of established telecommunications sites; and the use of buildings. The proposed upgrade accords with all of these points and is the obvious solution for providing enhanced network coverage and capacity within the local area for EE and H3G.

<u>City Development Plan 2017 – IPG3: (SG3) Economic Development – Interim Planning Guidance</u>

Section '8 – Telecommunications' acknowledges the importance of improving digital connectivity across Glasgow. It states:

"*The Council recognises the importance of new telecommunications infrastructure as part of meeting economic development objectives and maintaining the city's competitiveness. Delivery of high speed broadband, telecommunications and digital infrastructure which can enhance the competitiveness and operation of local economic enterprises and businesses will be supported. At the same time, it is also recognised that certain types of telecommunications infrastructure, such as antennas and mobile phone masts, can have significant visual impacts.*

The Council will support proposals for new telecommunications infrastructure, where:

(i) they accord with Placemaking and Sustainable Spatial Strategy policy aims and objectives;
(ii) high-speed broadband is provided, especially where this is delivered via discrete underground cabling;
(iii) the site proposed has been identified and justified as the most appropriate solution following a search for alternative locations and options, including sharing or co-location of sites. Reasons for rejecting sites should be submitted as evidence;
(iv) visual impact is minimised through careful and sensitive design and siting;
(v) it is demonstrated that cumulative impact has been considered and limited;
(vi) careful landscaping or screening can be incorporated into the proposal, where appropriate".

This document outlines the Council's approach to assessing applications to install and/or upgrade telecommunications apparatus. It is broken down into six separate sections.

Sections B, D, E and F are not relevant to this proposal and do therefore not require assessment against the proposed scheme.

For clarity, sections A and C are provided, in full, below:

"A - APPARATUS ON EXISTING BUILDINGS OR STRUCTURES:

- *Operators are encouraged to locate apparatus on existing buildings or structures, rather than erecting free-standing masts.*
- *Apparatus should ideally be located within fake features such as a tank house or flagpole. If the equipment is too bulky or numerous, then apparatus should be located back from the edge of the roof to minimise its visual impact.*
- *If a rooftop cannot take the loading of telecommunications equipment, permission may be granted for apparatus attached to, and viewed against, the top of the walls, on condition that the apparatus is coloured to match its background colour. Permission is unlikely to be granted where a badly designed proliferation of apparatus on a rooftop detracts from the visual amenity of the building or surrounding area".*

"C - SITE SHARING:

- *Wherever possible, operators are encouraged to share masts, or sites such as rooftops. Mast sharing, however, can often lead to an increase in height and bulk of the mast, making it much more visibly intrusive. Mast sharing is unlikely to be acceptable within residential areas or adjacent to residential properties".*

The proposal to upgrade the existing base station is considered to wholly comply with Points A and C, above. An existing building, 6 Baird Street, currently accommodates apparatus for

both MBNL and Vodafone. Given the level of equipment required to improve connectivity and capacity, and crucially, provide brand-new 5G coverage, there is no possibility of utilising 'fake features' on the rooftop. However, the proposed apparatus is split between three specially-designed rooftop tripods, rather than all installed on one larger stub tower. This therefore reduces the visual impact of the proposed scheme, as far as practicable.

Additionally, the positioning of the proposed tripods is dictated, somewhat, by the existing Vodafone apparatus on the rooftop plantroom. To ensure that the Vodafone base station remains ICNIRP compliant, the MBNL apparatus must be positioned on the roof edge. There is no other alternative location, or design, which could be implemented on this rooftop.

In terms of site sharing, the rooftop already accommodates apparatus for three Operators – EE, H3G and Vodafone. The upgrading of the existing apparatus for EE and H3G will ensure that increased capacity and connectivity is achieved for these networks, from this location, to the surrounding areas.

The proposed upgrading of this base station is in complete accordance with both local and national planning guidance. The scheme will result in a direct improvement to telecommunications provision within this area of Glasgow and therefore follows the direction of travel outlined by the Scottish Government.

No conflict has been identified with any other Development Plan policies.

Overall, it is considered the proposal complies with both national and local policy. In terms of national policy, it minimises the number of installations by sharing and would provide coverage for a wide range of technologies. It is of significance that the development ensures a continued and enhanced provision of local community facilities and services.

Summary

It is considered that the proposed development is compliant with both national and local planning policy, whereby the underlying aim is to provide advanced, high-quality and reliable communications infrastructure for the benefit of consumers whilst minimising visual impact. The specific requirement of the operators in this instance is to provide improved connectivity and network enhancement to the area, via improved 2G, 3G, 4G and brand-new 5G coverage for EE and H3G. The upgrading of this existing base station achieves this aim and represents the optimum environmental solution.

The applicant considers that the effect of the proposed upgrade is unlikely to cause significant harm on the surrounding area and any harm caused would be outweighed by the need for the proposal when balanced against the development plan and other material considerations. The siting and design of the apparatus is considered the most appropriate solution to providing improved network coverage to the area.

The proposal is fully compliant with ICNIRP guidelines.

On the basis of a recognised need to expand and promote high-quality electronic communications networks across the United Kingdom, it is considered that the proposal fully accords with the requirements of the Scottish Planning Policy, National Planning Framework 3, and the Council's Local Plan Policies. National planning policy is to facilitate the growth of new and existing telecommunications systems, and operators have obligations to meet customer demands for a continued and improved quality of service.

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