

Date: 02 June 2021



Our Ref: 50715/HTM006/RD

Chief Planning Officer  
Hertsmere Borough Council  
Elstree Way  
Borehamwood  
Hertfordshire  
WD6 1WA

**Submitted via Planning Portal**

Dear Sir or Madam,

**PLANNING APPLICATION FOR TELECOMMUNICATIONS UPGRADE AT MENDIP, LITTLE BUSHEY LANE, BUSHEY, WATFORD, HERTFORDSHIRE, WD23 4SB  
(NGR: E 514529 / N 195410) (SITE REF: 50715)**

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 the existing 12 metre monopole and wrap around diplexor cabinet with a 20 metre replacement monopole and wraparound cabinet, the removal and replacement of 1No. BTS3900 cabinet with 1No. Weston cabinet and 1No. Wiltshire cabinet 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.

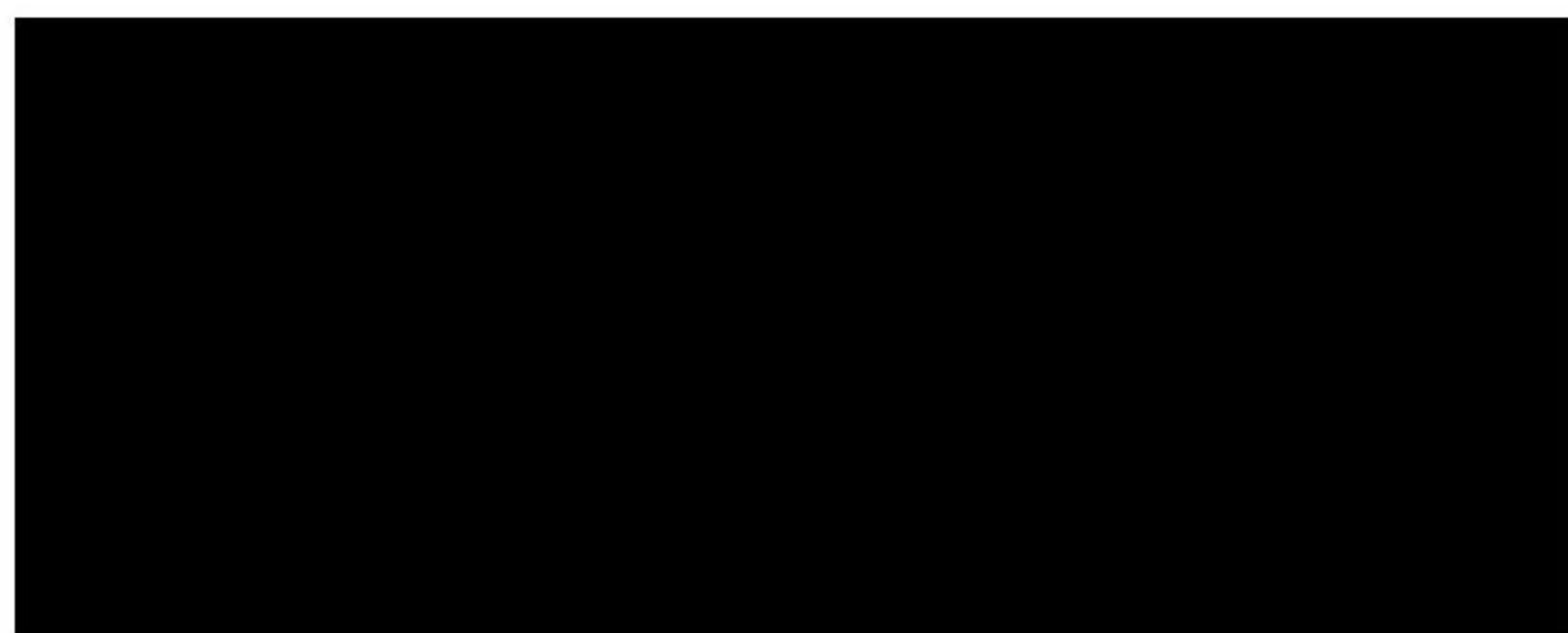
The supporting documents submitted with this application are as follows:

- Application Form (as generated through Planning Portal)
- Drawings 50715\_MENDIP\_002, 100, 150, 200, 250, 300\_A
- Planning Statement (Design and Access Statement)
- ICNIRP Certificate
- 5G and Future Technology
- Connected Growth Manual – Digital Infrastructure
- IET Guide to 5G

The application fee of £490 will be paid via the Planning Portal.

Should you have any queries regarding this matter, please do not hesitate to contact me on 0161 956 4155 or [roland.dahllof@avisonyoung.com](mailto:roland.dahllof@avisonyoung.com).

Yours faithfully,



Roland Dahllof  
Graduate Surveyor  
Telecoms

**Avison Young**  
**For and on behalf of Mobile Broadband Network Limited**

## **DESIGN AND ACCESS STATEMENT**

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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 Bushey 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 on Little Bushey Lane, a through road within a predominantly residential area. The proposed works comprise the removal and replacement of the existing 12 metre monopole and wrap around diplexor cabinet with a 20 metre replacement monopole and wraparound cabinet, the removal and replacement of 1No. BTS3900 cabinet with 1No. Weston cabinet and 1No. Wiltshire cabinet and ancillary development thereto.

The site is not located on or near a listed building and is not within proximity of designated Article 2(3) land.

As the proposal is for the installation of a replacement monopole which has increased by more than a third in width, a full planning application is submitted herein.



Google Streetview image of the existing site

## 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. By selecting to upgrade an existing site the character of the local area will be preserved by removing the need to source a new telecommunications site within this area, which is in line with planning guidance. The height of the monopole is determined by required technical objectives as well as surrounding features such as trees and other vegetation as the antennas must be above them to ensure optimal signal propagation towards the desired target area. Intervening elements can weaken signal strength which is detrimental to the site's functional purpose. In this instance the existing monopole could not be utilised to support the upgraded technologies which has necessitated a replacement monopole. The required height of 20 metres will consequently allow a wider area of land to be targeted for coverage improvement which will lead to increased public benefit. This is in addition to stronger and faster signal strength for the local community as a result of using upgraded technologies. 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 and may necessitate an additional site being required within close proximity.

Though it is recognised that changes to a telecommunications site will to a degree be recognisable in any given environment, the acceptability of this proposal should be determined on whether any detrimental harm is demonstrable when balanced against the public benefits to be provided in accordance with Paragraph 196 (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. It should also be highlighted that the site is an existing base station which is an established feature of this street scene. The existing site was deemed acceptable by the local planning authority in its inception and sets precedence for telecommunications sites in the area.

Although the proposed height increase of the monopole may be a recognisable change to the existing site context at a localised level, the height of surrounding trees and buildings will offer a degree of screening, which will reduce the level of visual impact for passers-by in the surrounding public realm. At a localised level, the slim design of the monopole will take a similar profile to the existing structure to be replaced and can also be likened to nearby telegraph poles and lighting columns which aid the site's assimilation into the street scene.

Furthermore, although the development proposes the installation of 1No. additional cabinets (one to replace an existing cabinet) they will be positioned in line with the existing cabinets to maintain a seamless line of street furniture which is similar to the current layout. Consequently, the proposed equipment will not appear overly prominent and dominating for passing traffic and seeks to preserve visual amenity.



View from Little Bushey Lane South



View from Little Bushey Lane North

Taken as a whole the proposed development will offer limited visual change to the current context as the equipment will remain within the same area. Although the base station is more discernible at a localised level, the simplistic design of the upgrade scheme will mimic a similar visual appearance to the current situation in which there is an established monopole in situ and the applicant therefore considers the proposal to be acceptable in regards to its siting and appearance.

In summary the proposed design is considered to be respectful of the surrounding elements 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. When taking into account the existing precedence for telecommunications equipment, the proposed upgrade displays a level of consistency with the current site which results in a similar extent of visual impact as the equipment presently in situ. Therefore, the applicant strongly believes the scheme demonstrates a sympathetic design that would not detract from the setting and character of the surrounding area and the proposed works are capable of being absorbed into the wider landscape.

Overall, it is considered that the scheme does not demonstrate substantial harm to the local area, and in any event, it is argued that the public benefits of the proposal would outweigh any perceived harm. As the scheme seeks to target a wider coverage area and 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.

The Hertsmere Local Plan Development Plan Document adopted January 2013 contains the following policies relevant to this application.

#### **Policy SP2 Presumption in favour of Sustainable Development**

*When considering development proposals, the Council will take a positive approach that reflects the presumption in favour of sustainable development contained in the National Planning Policy Framework. It will always work proactively with applicants jointly, in particular through the preapplication process, to find solutions which mean that proposals can be approved wherever possible, and to secure development that improves the economic, social and environmental conditions in the area.*

This proposal has followed a sequential approach to development and has identified an existing site for a 5G upgrade, rather than a new site is fully in accordance with NPPF. Moreover, Paragraph 38 of the NPPF requires Local planning authorities to work proactively with applicants to secure developments that will improve the economic, social and environmental conditions of the area.

The introduction of 5G technologies to the area will demonstrably improve the social and economic conditions of the local area. The importance of digital connectivity has become a key feature of everyday life for residents and businesses alike where operators are required to maintain a high level of coverage to satisfy current and future demands. The proposal will result in much needed improvements to mobile coverage in the area where local residents, businesses and visitors will benefit from faster speeds and higher quality coverage as a result.

### **3.2 NATIONAL PLANNING POLICY**

This legislation was formally adopted in July 2018 and replaces the previous version which was introduced in 2012.

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.

#### **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 80 – *“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 112 – *“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.

Paragraph 113 – *“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... 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 the proliferation of masts. A suitable existing base station was identified in this instance.

Paragraph 114 – *“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 115 – *“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.

### **Section 12 - Achieving well-designed places**

Paragraph 124 – *“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 Little Bushy Lane 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.

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

### **3.3 LONDON PLAN 2021**

The Plan recognises the strategic importance of providing necessary infrastructure, including modern communications networks that London requires to secure its long-term economic growth. The proposed works will improve digital connectivity to the benefit of Londoners and businesses. The site will ensure a high level of connectivity is sufficient to meet the rising demands of reliable data and services of the public as well as safeguarding the reduction of coverage within the surrounding area. This application is therefore an integral element in securing the Mayor’s vision for the delivery of modern communications networks across London.

With particular reference to Policy SI 6 (Digital Connectivity Infrastructure), the applicant is committed to fulfilling network obligations to cater current and future demands to ensure high quality coverage is provided which continues to be faster and stronger. In line with this policy the applicant has also demonstrated efforts to utilise existing base stations, rooftops or other structures prior to identifying new locations to fulfil network objectives. Ongoing network upgrades are an essential aspect of London’s global competitiveness which is recognised in the latest Plan.

## **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 5<sup>th</sup> 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 heterogenous 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.