5G SITE SPECIFIC SUPPLEMENTARY INFORMATION AND PLANNING JUSTIFICATION STATEMENT PREPARED BY DOT SURVEYING

1. Site Details

Site Name:	Pitmedden Road SW	Site Address:	Pitmedden Road,Aberdeen,Aberdeenshire AB21 7ES
NGR:	E: 388500 N: 813234		
Site Ref Number:	ABC12835	Site Type:	Proposed 5G telecoms installation: new 15m high Phase 8 3HG street pole and associated 3no. equipment cabinets (colour grey RAL-7035) are proposed to be located on on a grass verge on the south side of Pitmeddan Road, Aberdeen. .

2. Pre-Application Check List

Site Selection

Was Aberdeen City Council' mast register used to check for suitable sites by the operator or the LPA?		No
If no explain why: It was felt that the industry database was a more up to date source of information.		
Was the industry site database checked for suitable sites by the operator:	Yes	
If no explain why: N/a		

Pre-application consultation with Aberdeen City Council

Written offer of pre-application consultation:	N/a	
Was there pre-application contact:		Yes
Date of pre-application contact:	19th February 2021	
Name of contact: pi@aberdeencouncil.gov.uk roads@aberdeencity.gov.uk roadworkscoordination@aberdeencity.gov.uk	Local Planning Authority and Ward Members – by email	

Summary of outcome/Main issues raised:

H3G (Three) is committed to providing improved network coverage and capacity, most notably in relation to 5G services. In these unprecedented times of the Covid-19 pandemic, it is recognised that high-speed mobile connectivity is the lifeblood of a Community; facilitating educational benefits, providing access to vital services, improving communications with the associated commercial benefits for local businesses, enabling e-commerce and working from home, as well as enjoying access to social, media and gaming for leisure time activities.

The pre-consultation invited comments within a two-week period and while the merits of high-speed telecommunications are generally recognised; pre-application has identified the need to carefully consider the risk of increased visual amenity to adjoining residential properties through the siting of telecommunications infrastructure within urban settings.

An e-mail was issued to the planning department within Aberdeen City Council on the 8th March 2021 and included a set of planning drawings, site information sheet and an explanation behind the requirement for a new telecommunications installation. The information sheet also included details of other sites that have been investigated and discounted. Further details of the discounted sites are included within this document. Following the submission of an e-mail to the council's planning department, to be best of our knowledge no formal response has been received.

Ten Commitments Consultation

Rating of Site under Traffic Light Model:	Amber	

Prior to the submission of this application, pre-consultation was initiated with the local planning authority, providing an opportunity to discuss the development proposal and identify any site-specific issues.

The site has been given a rating of Amber under the Traffic Light Model 'TLR'.

Summary of outcome/Main issues raised:

Full details of the scheme are outlined within the planning drawings ABC12835_PLANNINF_REV_A.

H3G consider a 'Streetworks' installation positioned upon Pitmedden Road - adopted highway (grass verge), is best suited to extend high-speed mobile coverage to the target community.

As this mast is a 5G installation, to work it needs to be close to those who will benefit from the technology, and this is why such a small search area is required here. Movements outside thisarea are likely to require a proliferation of masts to do the same job, and even then, we are likely to have coverage gaps.

The nominal is located aon Pitmeddan Road which is north east of Aberdeen Airport.
ITo the south of the nominal, and taking up much of the search area is the grounds the Airport and it would not be possible to locate a structure within this area.

Option is located on a grass verge on the south side of Pitmeddan Road. There is existing streetfurniture located on the grass so he chances of a successful planning outcome are enhanced by the presence of existing street furniture. The site should be built no further than 3m form th edge of the road to ensure that it is witihn adopted land.

School/College

Location of site in relation to school/college: No schools/colleges were identified within the range of the site.
Outline of consultation carried out with school/college: Given the distance there was no consultation undertaken with the school on this proposal.
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: N/A

Developer's Notice

Copy of Developer's Notice enclosed?	Yes	
Date served:	14th March 2021	

3. Proposed Development

The proposed site:
The proposed solution involves erecting a new 15m high H3G Phase 8 Street Pole installation upon the grass verge of Pitmeddan Road The technical details of this proposal are illustrated within the enclosed application design drawings:- ABC12835_Planning_Rev A. It is recognised that the very nature of installing new 5G communications infrastructure within a dense urban setting requires a well-measured balance between the need to extend practical coverage with the risk of increasing visual intrusion. Three are in the process of building the UK's fastest 5G network and has 140MHz of 5G spectrum (and 100MHz of it contiguous), which means our service will be much faster and shall have the ability to handle more data. In making this technology available to customers, H3G will need to provide a mix of upgrades involving existing sites and the building of new sites. New sites will be needed for many reasons, including the higher radio frequencies used for 5G, which do not travel as far as those frequencies currently in use. In addition, not all existing sites will have the capacity of being upgraded. The very nature of 5G and the network services it provides, means the equipment and antennas are quite different to the previous, and existing, service requirements. In particular, the design of the antennas, and the separation required from other items of associated equipment, is such that we cannot utilise certain structures that provide a means of support for another operator, most notably in a street works or highways environment. The search process involved an initial 'desk-top' survey to ascertain and identify major constraints and impediments, followed by a physical search of the area. As with all 5G cells, this is an extremely constrained cell search area and options within the area are very limited. Nevertheless, the most viable solution that minimises amenity issues, has been put forward. The site selection process has also been influenced by the numerous vertical elements of street furniture distributed around the vicinity of the site, including street lighting columns, trees and buildings. The height of the pole has been kept to an absolute minimum, allowing the installation to provide this essential new 5G coverage to the intended target area. In this location, existing base stations are not capable of supporting additional equipment to extend coverage across the target area and prospective 'in-fill' mast sites are extremely limited. Other sites have been identified and subsequently discounted. Notwithstanding, there is an acute need for a new telecommunications installation to deliver the required community coverage.

The cell search areas for 5G are very constrained, with a typical cell radius of 50 metres. In this particular instance and as outlined above, the target/search area is centred over Pitmeddan Road. Due to the operational parameters of 5G, moving the search area or seeking locations a long way from the target/search area is not operationally feasible. Owing to a lack of available options, the application site is situated just outside the target/search area itself.

The application site is therefore considered the single most appropriate location to support service delivery through a 15 metre Streetpole, with equipment cabinets typical of control boxes commonly found upon the adopted highway. To accord with the present street furniture on Pitmeddan Road, the pole and cabinets will be painted light Grey (RAL7035). However, the equipment can be painted to the requirements of Aberdeen City Council.

Figure 1 - Site Photograph (view looking north) from Pitmeddan Road.
Aspect of street furniture, trees and buildings

The proposed site is considered the best available compromise between extending 5G service across the target 'coverage hole' with the selected Streetworks pole height and associated antenna and ground-based cabinets restricted to the absolute minimum, which is capable of providing the required essential coverage.

The site shall be situated upon an adopted public highway, in a position that will not impede pedestrian flow or the safety of passing motorists. The equipment cabinets will be situated at the base of the pole.

Planning Policy Relevant to the Development Site:

Development Plan Policy: Scottish Planning Policy (SPP) & PAN62

Local Plan Policy: Aberdeen Local Development Plan 2017, Policy C12 – Telecommunications Infrastructure.

In this instance, a new 15m high H3G Phase 8 Streetpole with associated 3no. equipment cabinets (colour Grey RAL7035) are to be positioned upon the adopted public highway, to reduce visual impact in a residential setting. For the reasons listed above, the proposed site and scheme is not considered to pose an undue onerous material consideration and favourable determination is invited.

Outcome 1: A successful, sustainable place – supporting sustainable economic growth and regeneration, and the creation of well-designed, sustainable places."

"14. NPF3 aims to strengthen the role of our city regions and towns, create more vibrant rural places, and realise the opportunities for sustainable growth and innovation in our coastal and island areas.

15. The SPP sets out how this should be delivered on the ground. By locating the right development in the right place, planning can provide opportunities for people to make sustainable choices and improve their quality of life. Well-planned placed promote well-being, a sense of identity and pride, and greater opportunities for social interaction. Planning therefore has an important role in promoting strong, resilient and inclusive communities. Delivering high-quality buildings, infrastructure and spaces in the right locations helps provide choice over where to live and style of home, choice as to how to access amenities and services and choice to live more active, engaged, independent and healthy lifestyles."

"This SPP introduces a presumption in favour of development that contributes to sustainable development.

29. This means that policies and decisions should be guided by the following principles;

- ***giving due weight to net economic benefit;***

- ***responding to economic issues, challenges and opportunities, as outlined in local economic strategies;***
- ***supporting good design and the six qualities of successful places;***
- ***supporting delivery of infrastructure, for example transport, education, energy, digital and water***

The Adopted Roads Register shows that the proposed location falls within adopted Highway.

In this instance, a new 15m high H3G Phase 8 Streetpole with associated 3no. equipment cabinets (colour Grey RAL7035) are to be positioned upon the adopted public highway (grassland), to reduce visual impact.

The design of the proposed antenna and ground-based cabinets is considered to be the least visually intrusive option available, benefiting from an array of nearby street lighting, backdrop of grassland and trees. Whilst it is accepted that there will be a localised visual increase through the installation of additional apparatus, it is considered that this will not overly detract from the character of the existing streetscape or indeed, the wider area. As a consequence, the proposed site and scheme is not considered to pose an undue onerous material consideration and favourable determination is invited.

The proposed site will also assist with The Scottish Government's objectives of ensuring people across Scotland have access to 5G as outlined within a recent publication 'Forging Our Digital Future with 5G – A Strategy for Scotland' (published August 2019).

Type of Structure	
Description: Proposed Phase 8 Monopole c/w wraparound Cabinet at base.	
Overall Height:	15m AGL
Height of existing building	N/A
Equipment Housing:	
Length:	See drawings
Width:	See drawings
Height:	See drawings
Materials	
Tower/mast etc. - type of material and external colour:	Phase 8 Monopole, colour Grey RAL7035
Equipment housing - type of material and external colour:	Profile steel cladding, colour Grey RAL7035

Reasons for choice of design:
The proposed installation is an H3G LTE (Three) Phase 8 Monopole which will facilitate educational benefits, providing access to vital services, improving communications with the associated commercial benefits for local businesses, enabling e-commerce and working from home, as well as enjoying access to social, media and gaming for leisure time activities.

4. Technical Information

ICNIRP Declaration attached ICNIRP (International Commission on Non-Ionizing Radiation Protection) aims to protect people and the environment against adverse effects of non-ionizing radiation (NIR). 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 the site are taken into account.	Yes	

5. Technical Justification

Reason(s) why site required
The site is required to provide new 5G coverage for H3G LTE, improving service in and around Pitmeddan Road. The cell search areas for 5G are extremely constrained with a typical cell radius of approximately 50m. In general, it would not be feasible to site the installation too far from the target locale (Refer to Figure 4).

6. Site Selection Process – alternative sites considered and not chosen

Discounted Options
In accordance with the sequential approach outlined in the NPPF, the following search criteria have been adopted. Firstly, consideration is always given to sharing any existing telecommunication structures in the immediate area, secondly; consideration is then given to utilising any suitable existing structures or buildings and thirdly, sites for freestanding ground-based installations are investigated. This sequential approach is outlined below: a) Mast and Site Sharing b) Existing Buildings Structures c) Ground Bases Installations In compliance with its licence and the sequential approach to site selection, all attempts to utilise any existing telecommunication structures where they represent the optimum environmental solution have been employed. The Mast Data register is always examined prior to the submission of a planning application.

Discounted Options and National Planning Policy:

Typical to most 5G cell site deployment within the urban environment, this is an extremely constrained cell search area. It is recognised that the very nature of installing new 5G mast infrastructure within a dense urban setting requires a well-considered balance between the need to extend practical coverage with that of increasing risk of visual intrusion. A Street Pole with associated cabinets is deemed to be the only and most appropriate solution available. The DSA (Designated Search Area) is illustrated in Figure 4, together with site locations that were investigated and subsequently discounted.

Discounted Options:

Site Reference	Reason why discounted
D1 - Lawson Drive	pavement not wide enough to accommodate equipment at this location.
D2 - Pitmedden Drive	
D3 – Kirkton Avenue	pavement not wide enough to accommodate equipment at this location.
D4 – Pitmedden Mews	Close to residential property and Private road

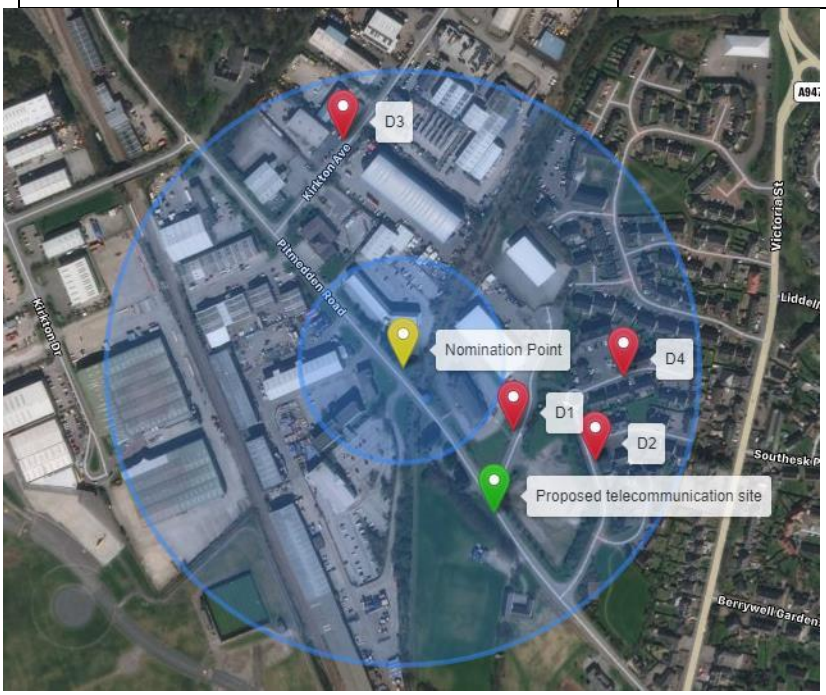

Figure 4 - Proposed Site Location: 100m DSA (Desired Search Area) shown circled

7. Additional Relevant Information

Background to the Proposal

H3G supports the Scottish Governments aspirations to strengthen digital communications capacity and expand its mobile network coverage across the country.

Modern mobile phone base stations operate on a low power and accordingly, need to be located within close proximity to the areas they are required to serve. Increasingly, people are also using mobile devices in the home which requires the installation of base station infrastructure closer to such residential areas.

The proposed scheme has been designed to ensure the fundamental principles of good siting and appearance are adhered to. The overall impact of the installation on the environment is therefore considered limited when viewed in the context that high-speed mobile connectivity is the lifeblood of a Community.

In this case, the installation will be positioned upon a wide section of pavement and adjacent to a large area of grassland with trees, a major road and an array of existing street furniture, including tall lamp posts.

DEVELOPMENT PLAN POLICY:

Scottish Planning Policy

The document Scottish Planning Policy (SPP), published by the Scottish Government in June 2014, details The Scottish Government's national planning policy guidance in respect of digital infrastructure.

SPP sits alongside other Scottish Government planning policy documents.

NATIONAL PLANNING POLICY:

The National Planning Framework (NPF) provides a statutory framework for Scotland's long-term spatial development. The NPF sets out the Scottish Government's spatial development priorities for the next 20 – 30 years. The SPP sets out policy that will help deliver the objectives of the NPF.

Scottish Planning Policy (SPP) at paragraph 292 details how it will Support Digital Connectivity. NPF highlights the importance of digital infrastructure, across towns and cities, and in particular Scotland's more remote and island areas. Scotland's economy and social networks depend heavily on high-quality infrastructure. To facilitate investment across Scotland, planning has an important role to play in strengthening digital communications capacity and coverage across the country.

"Policy Principles

292. NPF3 highlights the importance of our digital infrastructure, across towns and cities, and in particular our more remote rural and island areas. Our 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.

293. The planning system should support:

- ***Development which helps deliver the Scottish Governments commitment to world-class digital connectivity;***
- ***The need for networks to evolve and respond to technology improvements and new services;***
- ***Inclusion of digital infrastructure in new homes and business premises; and***
- ***Infrastructure provision which is sited and designed to keep environmental impacts to a minimum.***

Development Planning

294. Local development plans should reflect the infrastructure roll-out plans of digital communications operators, community groups and others, such as the Scottish Government, the UK Government and local authorities.

295. 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.***

296. 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 combination with existing equipment in the area;***
- ***details of the design, including height, materials and all components of the proposal;***
- ***a declaration that the equipment and installation is designed to be in full compliance with the appropriate ICNIRP guidelines for public exposure to radiofrequency radiation131; and***
- ***an assessment of visual impact, if relevant.***

297. Policies should encourage developers to explore opportunities for the provision of digital infrastructure to new homes and business premises as an integral part of development. This should be done in consultation with service providers so that appropriate, universal and futureproofed infrastructure is installed and utilised.

Development Management

298. 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. For developments that will deliver new connectivity – for example, mobile connectivity in a "not spot" – consideration should be given to the benefits of this connectivity for communities and the local economy.

299. 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 effects of equipment should be taken into account.

300. 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."

Conclusion

The Town and Country Planning (Scotland) Act 1997 – Section 25 – requires decisions to be made in accordance with Development Plans unless material considerations indicate otherwise.

Scottish Planning Policy was published in 2014. This SPP introduces a presumption in favour of development that contributes to sustainable development.

The SPP also affirms the Scottish Governments commitment to 'world-class' digital connectivity.

The Scottish Government considers that high-speed mobile connectivity is the lifeblood of a Community. H3G (Three) is committed to providing improved network coverage and capacity, most notably in relation to 5G services.

This application is for a new 5G streetworks installation to improve connectivity in and around Pitmeddan Road.

We consider the proposal is in accordance with both National and Local Planning Policy.

The use of the public highway to accommodate a new telecommunications installation complies with government and local planning policy guidance, where the underlying aim is to provide an efficient and competitive telecommunication system for the benefit of the community, while minimising visual impact. Taking into account the site-specific factors and technical constraints, available options and planning constraints, it is considered that the proposed site and design clearly represents the optimum environmental solution to extend coverage to the target Community.

In accordance with a recognised need to expand and promote telecommunications networks across the region, it is considered that the proposed scheme fully accords with the National Planning Framework, Scottish Planning Policy and should be approved by the Council.

Contact Details

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Signed:	*T Gallivan*	Date:	14th May 2021
Position:	Planner	Company: (on behalf of above operator)	Dot Surveying Ltd