Clarke Telecom Limited
Unit E, Madison Place,
Northampton Road, Manchester,
M40 5AG, UK
www.clarke-telecom.com

T: +44 (0) 161 785 4500

F: +44 (0) 161 785 4501

Our ref: CTIL_30292801_TEF_88925

Coucnillor Paula Appleby
Members' Services Office
Manchester City Council PO Box 532
Town Hall Extension
Manchester
M60 2LA

Email: cllr.p.appleby@manchester.gov.uk **VIA EMAIL**

21st February 2020

Dear Coucnillor Appleby

PROPOSED RADIO BASE STATION INSTALLATION AT CTIL_30292801_TEF_88925 SW ON BROADWAY, BROADWAY, MANCHESTER, GREATER MANCHESTER, M40 3WP. NGR E:388823 N:401881

Cornerstone and Telefónica are in the process of progressing a suitable replacement site in the Manchester area for a radio base station capable of providing the latest 4G and new 5G technologies. The purpose of this letter is to consult with you and seek your views on our proposal before any planning submission is made. We understand that you are not always able to provide site specific comments, however, Cornerstone and Telefónica are committed to consultation with communities on our mobile telecommunications proposals and as such would encourage you to respond.

As part of Telefónica's continued network improvement program, there is a specific requirement for a new installation at this location to provide improved 2G, 3G, 4G and new 5G coverage and capacity, ensuring that this area of Manchester has access to the latest technologies. This follows the inability of the operator to upgrade the existing site it is utilising some 178m north west of the proposed location. Telefonica requires the new 5G to be installed in to its network in this cell area. However, the existing installation is not designed to be able to support both operators 5G antennas without being radically redesigned and replaced with a much bulkier and bigger structure. This would have a much greater impact on the visual amenity of the streetscene. Therefore Telefonica is looking to replace its coverage at the existing site with a new replacement radio base station, as close as possible, in order to replicate its existing coverage in this cell area, upgrade its 2G, 3G and 4G technologies and provide a new 5G service to this part of Manchester.

Mobiles can only work with a network of base stations in place where people want to use their mobile phones or other wireless devices. Without base stations, the mobile phones and other devices we rely on simply won't work.

This replacement site will enable 5G coverage to be provided to this area of Manchester. The Government recognises that widespread coverage of mobile connectivity is essential for people and businesses. That is why the Government is committed to extending mobile geographical coverage further across the UK, with continuous mobile connectivity provided to

Clarke Telecom Limited
Unit E, Madison Place,
Northampton Road, Manchester,
M40 5AG, UK
www.clarke-telecom.com
T: +44 (0) 161 785 4500
F: +44 (0) 161 785 4501

all major roads and to being a world leader in 5G. This will allow everyone in the country to benefit from the economic advantages of widespread mobile coverage.

As well as improved mobile signal, 5G networks are also crucial to drive productivity and growth across the sectors that local areas are focusing on through their emerging Local Industrial Strategies. Enabling and planning for 5G implementation is central to achieving the Government's objective to deliver prosperity at the local level and enable all places to share in the proceeds of growth.

5G service provision will bring faster, more responsive and reliable connections than ever before. More than any previous generation of mobile networks, it has the potential to improve the way people live, work and travel, and to deliver significant benefits to the economy and industry through the ability to connect more devices to the Internet at the same time, the 'Internet of Things'. This will enable communities to manage traffic flow and control energy usage, monitor patient health remotely, and increase productivity for business and farmers, all through the real-time management of data.

The demand for mobile data in the UK is increasing rapidly, and as households and businesses become increasingly reliant on mobile connectivity, the infrastructure must be in place to ensure supply does not become a constraint on future demand.

Please find below the details of the proposed site.

Our technical network requirement is as follows:

CTIL_30292801_TEF_88925 SW ON BROADWAY

The site is needed to maintain and improve 2G, 3G, 4G coverage and capacity for Telefónica to ensure that its customers continue to experience access to the latest service provision currently available and have access to a new 5G network. This is because the operator needs to find a replacement for the site it is currently providing 2G, 3G and 4G services from some 178m north west of the site on Broadway, which cannot be upgraded for Telefonica's technology requirements for technical reasons highlighted above and more fully explained in the discount section below. The replacement installation will also meet the extra demands on the network in this area as new technologies improve increasing the demand for 4G and new 5G technologies.

A number of options have been assessed in respect of the site search process and we consider the best solution is as follows:

SW ON BROADWAY, BROADWAY, MANCHESTER, GREATER MANCHESTER, M40 3WP. NGR E:388823 N:401881

The proposed works comprise installation of a 20m slim-line column supporting 6 no. antennas, 2 no. transmission dishes, 2 no. equipment cabinets and ancillary development thereto including a GPS module, and 3 no. Remote Radio Units (RRUs)

Clarke Telecom Limited
Unit E, Madison Place,
Northampton Road, Manchester,
M40 5AG, UK
www.clarke-telecom.com
T: +44 (0) 161 785 4500
F: +44 (0) 161 785 4501

The operator is limited in siting options as there is a requirement to provide equivalent replacement coverage and capacity for this area of Manchester. The replacement of an existing site means that the operator has to be located as close as possible to the existing installation in order to maintain the provision of equivalent coverage and capacity to the surrounding local area. The proposed location is some 178m south east of the existing radio base station. This is the nearest suitable location that the operator is able to position their replacement apparatus.

The proposed height at 20m is essential in order to provide equivalent replacement coverage to the target coverage area. The operator's radio engineer has also confirmed that the height is required to provide coverage to the main arterial route of the M60 and Junction 20. 5G new radio technologies operate in higher frequency bands than older technologies. Since it operates at higher frequencies where attenuation of the radio signal is naturally higher and the effects of clutter are greater it will normally require a higher structure to achieve the same coverage footprint. To increase capacity and data speeds to the user, the antenna will normally need to be mounted higher than conventional antennae. These factors drive a requirement for an increase in antenna height in 5G.

In order to minimise the width of the proposed column, the antennas are split in to a dual stack formation where 3 antennas will be located at the top of the column and the other 3 antennas will be located underneath. This makes the lower antennas 3.5m lower than the top of the pole. Thus, if the column were to be any lower, the antennas would not be able to clear the trees and urban clutter and as such would not be able to operate effectively.

The column is a simple, functional, vertical structure necessary to provide replacement and new service provision to Manchester and the surrounding area. There are other vertical structures in the streetscene which will help it assimilate in to the local environ including lighting columns, telegraph poles, pylons, commercial signage, road signage and a bus shelter. The column is proposed to be finished in a grey colour but can be coloured any other colour that the LPA consider appropriate.

The cabinets are designed to appear like other statutory undertakers equipment cabinets. They are small for telecommunications apparatus and are proposed to be coloured green to assimilate with other equipment cabinets commonly found in urban environments. The cabinets can be installed under the operators permitted development rights, but have been included on the plans and in the description in order to remain fully transparent.

The RRUs are designed to make the antennas more efficient and reduce the need for equipment cabinets at ground level, therefore minimising ground level clutter in this area. They are located underneath the lowest set of antennas, out of the natural eye line of the casual passer-by and therefore will not appear prominent in the streetscene.

We have considered alternative site options and discounted as follows:

Clarke Telecom Limited
Unit E, Madison Place,
Northampton Road, Manchester,
M40 5AG, UK
www.clarke-telecom.com
T: +44 (0) 161 785 4500
F: +44 (0) 161 785 4501

Site[3]	Site Name and address		NGR	Reason for not choosing[4]
ETS - existing Telecom site	Name	Existing VF site (NR_44514)		O - Other
	Line 1	Broadway	Eastings	This is the existing VF site that forms part of the TEF unwind project and is to be replaced with an alternative site.
	Line 2		388853	
	Town	Manchester	Northings	
	County	Greater Manchester	401930	
	Postcode	M40 3WN		
GF - Greenfield	Name	Moston Brook car park		T - Technical Difficulties
	Line 1	Broadway	Eastings	This area is surrounded by very mature trees and a mast of at least 25 metres and a lattice structure would be required. This would have a greater visual impact than a slim line pole suggested as option 1. There is also restricted access to build the site.
	Line 2		388902	
	Town	Manchester	Northings	
	County	Greater Manchester	401772	
	Postcode	M35 0DX		
GF - Greenfield	Name	Lower Memorial Park		T - Technical Difficulties
	Line 1	131 Broadway	Eastings	This area is surrounded by very mature trees and a mast of at least 25 metres and a lattice structure would be required. This would have a greater visual impact than a slim line pole suggested as option 1. There is also restricted access to build the site. There is also a children's playground so local opposition may be received.
	Line 2	Failsworth	388731	
	Town	Manchester	Northings	
	County	Greater Manchester	401726	
	Postcode	M40 3NL		

The Local Planning Authority mast register and our records of other potential sites have already been reviewed, the policies in the Development Plan have been taken into account and the planning history of the site has been examined.

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

In order to give you time to send your comments or request further information, we commit to allow at least 14 days before an application is submitted to the Local Planning Authority. This 14 day period starts from the date at the top of this letter.

We would also be grateful if you could please advise of any local stakeholders or groups that might like to make comments. For your information pre-consultation letters and a set of plans have been sent to the other local ward councillors for Moston Ward and the local MP Lucy Powell
We look forward to receiving any comments you may have on the proposal.

Yours sincerely



Jennie Hann BSc MTPL MRTPI
Planning Manager, Clarke Telecom
Tel: +44 (0)161 785 4500 Fax: +44 (0)161 785 4501
Email: jennie.hann@clarke-telecom.com
(For and on behalf of Cornerstone and Telefónica UK Limited)