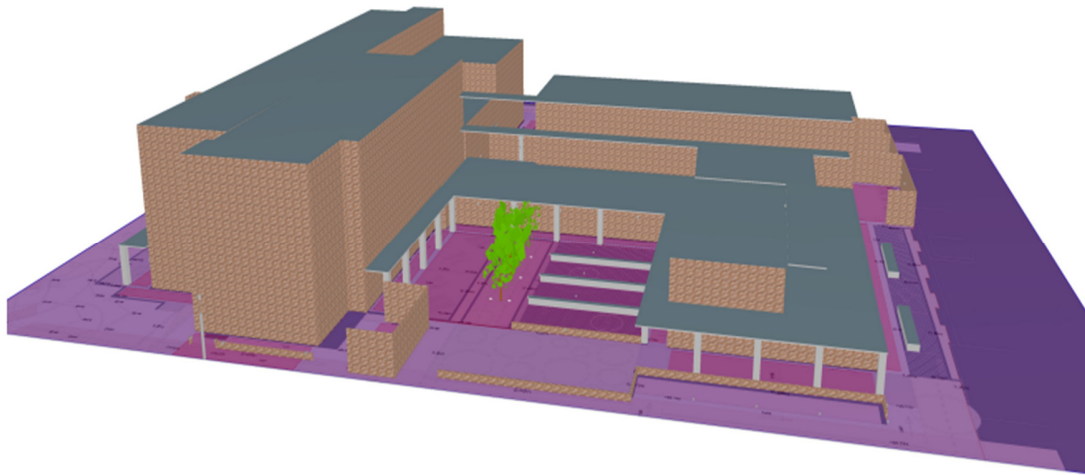


HCC Property Services

E05076 Hexham Road Redevelopment
Superfast Broadband Strategy Statement
February 2023



Contents

1.Introduction	3
1.2 Purpose of the Strategy	3
1.3 Site Description	3
1.4 Proposed Development	3
2 Superfast Broadband Explained	3
2.1 What is Superfast Broadband?	3
2.2 Benefits of Superfast Broadband in the Domestic Sector	3
2.3 Types of Broadband Connections	4
3 Policy Context	5
3.1 UK Digital Strategy and Superfast Broadband	5
4 Infrastructure Delivery Options	6
4.1 Introduction	6
4.2 BT Openreach.....	6
4.3 Vodafone.....	6
4.4 Talk Talk	7
4.5 Sky	7
4.6 Preferred Approach at the Proposed Development.....	7
5 Summary	7

1. Introduction

The Superfast Broadband Strategy Statement (SBSS) is prepared for the application for a day centre providing social care services (Use Class E(f)) and specialist housing (Use Class C3) with Landscaping, car parking and access at Hexham Road.

1.2 Purpose of the Strategy

-Provision of superfast broadband is listed in the Local Plan as part of the Infrastructure Delivery Scheme (Table 10.2) but it is not a policy requirement. RBC's planning application validation checklist, requires a SBSS to be submitted for all proposals of housing development with over 50 units and the proposal is less than this. Without prejudice to this we have produced this SSB. The guidance states:

- "SBSS documents should outline how the developer has considered facilitating the proposed development with super/ultrafast broadband (up to 285Mbps+) and what discussions they may have had with the operators in advance of submitting a formal planning application." - The SBSS considers the provision of superfast broadband to the residential elements of the Proposed Development.

1.3 Site Description

Hexham Road is a 0.4ha site located approximately 2km south of Reading Town Centre. It is part of the Whitley area of Reading, which is sub-urban in nature and is well connected to public transport, cycling and walking routes into the town centre.

1.4 Proposed Development

The development proposals seek full planning permission for a day centre providing social care services (Use Class E(f)) and specialist housing (Use Class C3) with Landscaping, car parking and access.

2 Superfast Broadband Explained

2.1 What is Superfast Broadband?

'Superfast broadband' refers to broadband download speeds between 30 Mbps and 300 Mbps, defined as ultrafast.

Unlike the majority of UK broadband connections, which use copper telephone lines, superfast broadband products use sophisticated fibre optic cables made up of glass and plastic, which allows a greater amount of data (i.e. a larger amount of data to be transmitted at any one time). It is estimated that a total of 27.7 million UK homes (95%) had access to superfast broadband as of May 2020.

2.2 Benefits of Superfast Broadband in the Domestic Sector

Access to superfast broadband allows homeowners to make the most of all the entertainment on offer on the internet, including downloading and streaming television shows, movies and music, as well as providing a better online gaming experience. It also allows better use of remote access for home

working and studying, which are anticipated to become more predominant following the Covid-19 pandemic. The quality of the data transfer for fibre versus copper is the main advantage.

2.3 Types of Broadband Connections

There are several routes within the UK that can provide 'Superfast Broadband':

- Fixed Line Broadband – this includes the following three types of fibre broadband connections:

1. Fibre-to-the-Cabinet (FTTC) – this is the most widely available superfast broadband which uses the existing copper telephone network. Fibre optic cables are installed in a nearby telephone exchange or distribution point to the street or internal cabinets which then connect to a standard phone line. There are no losses over the copper cable from the cabinet to the unit, as long as the cable length does not exceed 90m;

2. Cable (hybrid fibre coaxial) – this is where fibre is installed to a nearby cabinet and then segments of a coaxial copper network connect premises in the vicinity (also known as Asymmetric Digital Subscriber Line, or ADSL); and

3. Fibre-to-the-Premises (FTTP) - this is also often referred to as Fibre-to-the-Home (FTTH) and provides end-to-end fibre optic connection the full distance from the exchange to the building.

- Fixed Wireless Broadband – fixed wireless broadband is a way of achieving connectivity in premises without the need for a physical (wired) connection. A small dish is attached to the side of the property, which then links into a local transmitter which is connected to the fibre network spine.

- Satellite Broadband – satellite broadband is another way of achieving connectivity in premises, without the need for a physical (wired) connection. A satellite dish is installed onto the property for which the incoming occupant will be required to purchase a satellite internet package. Satellite packages tend to currently be more expensive for consumers than fibre or fixed wireless packages.

- Mobile Broadband - the four major mobile network operators (Vodafone, EE, Three, and O2) provide widespread coverage of mobile broadband through their 4G networks. Mobile broadband doesn't require a physical (wired) connection, instead consumers purchase a "dongle" that plugs into their computer or run their device as a 'Hot Spot', and then have access to the mobile network of their choosing. 1. 5G is the new generation of wireless communications technology, following on from 4G. 5G delivers faster mobile broadband with higher capacity and faster response times. 5G is being rolled out by the four major mobile network operators: Vodafone, EE, Three and O2. The first commercial networks providing 5G went live in major UK cities in 2019. The UK Government is targeting that the majority of the population will be covered by a 5G signal by 2027.

3 Policy Context

▪ Introduction

- This section provides a summary of the UK's position on superfast broadband.

3.1 UK Digital Strategy and Superfast Broadband

Future Broadband infrastructure is considered vital in supporting the overall growth agenda in Britain. - The UK Digital Strategy recently prepared to specifically address the approach that the UK will take toward digital technology and in particular, broadband internet connection. It states that the UK's digital infrastructure "must be able to support this rapid increase in traffic, providing coverage with sufficient capacity to ensure data can flow at the volume, speed and reliability required to meet the demands of modern life. Broadband and mobile must be treated as the fourth utility, with everyone benefiting from improved connectivity."

Key principles set out in the UK Digital Strategy relating to broadband provision include:

- Implementation of a 'Universal Service Obligation' "giving every individual, business and public premise across the country the right to request an affordable high speed broadband connection"
- Acceleration of the "development and uptake of next generation digital infrastructure – including full fibre and 5G";
- "The future of high-speed and high-quality connectivity lies in deeper, more extensive fibre networks.

As a consequence of the planned digital strategy, these are some of the main goals, related particularly to broadband:

- By 2025, we will have achieved at least 85% coverage nationwide of gigabit broadband through the Project Gigabit programme, increasing to at least 99% gigabit coverage by 2030 (DCMS).
- By 2025, we will have expanded mobile network coverage to 95% of the UK through the Shared Rural Network (DCMS).
- By 2027, we are aiming for the majority of the population to have access to 5G signal via the 5G Trials and Testbeds programme (DCMS).
- By 2030, we are aiming for 35% of mobile network traffic to be delivered by open networks as part of delivering 5G supply chain diversification (DCMS).

4 Infrastructure Delivery Options

4.1 Introduction

- There are several utility companies that have the relevant accreditations and licences as issued by OFCOM (The Office of Communications) to identify feasible and viable delivery solutions to provide superfast broadband infrastructure to the Site.
- For the purposes of this strategy, a proxy postcode has been used to assess the availability of broadband infrastructure at the Site.
- According to OFCOM's mobile and broadband checker, superfast broadband is available in the area with a highest available download speed of 279 Mbps and a highest available upload speed of 47 Mbps. There is also localised ultrafast broadband access available in the area. The leading providers that supply broadband services to the area and types of connection available include:
 - BT Openreach - the Site could get several types of internet with BT, including BT Wholesale Asymmetric Digital Subscriber Line (ADSL), BT Wholesale ADSL Max, BT Wholesale Broadband Connect (WBC) (21CN), BT Wholesale Symmetric Digital Subscriber Line (SDSL) and BT FTTC;
 - Vodafone - Vodafone Local Loop Unbundling (LLU);
 - Talk Talk - TalkTalk LLU; and
 - Sky - Sky Broadband.

The above list is not exhaustive. However, for the purposes of this SBSS the four providers above have been explored further as potential delivery options, because these companies have online broadband checkers. - The following sections summarise the consideration given to facilitating superfast broadband at the Proposed Development and the main options available at this stage.

4.2 BT Openreach

BT Openreach is one of the main installers of fibre cable for connection to a superfast broadband service. Openreach also looks after the fibres, wires and cables that connect the country. It does not sell superfast broadband services (this is done by a separate BT body), but instead works on behalf of over 560 services providers (e.g. Talk Talk, BT, Sky) to maintain the local access network that covers at least 30 million customers. - The BT website has a fibre availability checker that shows whether a specific area is fibre enabled or not. The checker shows that the Site is enabled for fibre broadband (up to 300 Mbps) and could receive a variety of BT packages. Firstly, Fibre Essential which provides download speeds of between 19 Mbps and 36 Mbps and an upload speed range of 5 – 7 Mbps. Secondly, the Fibre 1 package, which provides an average speed of 50 Mbps.

4.3 Vodafone

Vodafone's online broadband checker confirms that superfast broadband speeds from 40.2 Mbps are available at the site.

4.4 Talk Talk

Talk Talk's online facility confirms that super/ultrafast broadband speeds of up to 285 Mbps are available at the site.

4.5 Sky

Sky's online facility confirms that super/ultrafast broadband speeds of up to 144 Mbps are available at the site.

4.6 Preferred Approach at the Proposed Development

Sections 4.2, 4.3, 4.4 and 4.5 confirm that there are a range of options for the delivery of super/ultrafast broadband at the proposed development. It is considered at this stage that BT Openreach provides the optimum service for the Site for the following reasons:

BT Openreach provides an average speed of 50 Mbps in the area;

BT Openreach provides the largest range of internet connectivity options available to the Site;

BT Openreach is obliged to allow line rentals through their open access policy, thus ensuring end users have flexibility of supplier.

The strategy proposed at this stage is to instruct BT Openreach, however it is recognised that there are a range of other operators available. Thus, the preferred superfast broadband installer and installation strategy will continue to be reviewed as the detailed design progresses. It is recommended that further detailed connectivity checks and engagement with the various internet providers is undertaken following outline planning consent.

5 Summary

This Superfast Broadband Strategy Statement outlines how the Applicants intend to consider facilitating the proposed development with superfast broadband.

The strategy has identified that there are a range of potential options for delivering superfast broadband at the development at this stage. This SBSS has focused on BT Openreach, Vodafone, Talk Talk and Sky as the best-placed companies to provide this key communications utility to the Site, as they are already active in the Reading area.

At this stage in the development process, it is considered that BT Openreach is likely to provide the optimum service for the Proposed Development for the following reasons:

BT Openreach provides an average speed of 50 Mbps in the area;

BT Openreach provides the largest range of internet connectivity options available to the Site; and BT Openreach is obliged to allow line rentals through their open access policy, thus ensuring end users have flexibility of supplier.

E05076 – Hexham Road Redevelopment Superfast Broadband Strategy Statement



The strategy proposed at this stage is to instruct BT Openreach, however it is recognised that there are a range of other operators available. Thus, the preferred superfast broadband installer and installation strategy will continue to be reviewed as the detailed design progresses. It is recommended that further detailed connectivity checks and engagement with the various internet providers is undertaken following outline planning consent.