

Broadband Connectivity Assessment

Stocktons

Liquid Business (Manchester) Limited

March 2025

PLANNING SOLUTIONS FOR:

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ADMINISTRATION PAGE

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Issue	Date	Detail of Changes
1	October 2024	Initial issue
2	March 2025	Updated reference to National Planning Policy Framework and inclusion of latest site plan

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EXECUTIVE SUMMARY

Report Purpose

There is a national requirement to ensure that new residences have access to superfast broadband download speeds (understood to mean a minimum of 30 Mbps). There is also a requirement in Manchester that all new development have Fibre To The Premises (FTTP)¹ connections.

Pager Power has been commissioned to investigate the broadband connectivity at the proposed building development, located on Great Ancoats St, Manchester city centre. The proposed Stocktons development will consist of two building plots (A&B) which will contain a total of 758 residential apartments and flexible commercial space. This report presents an investigation into the current internet speeds and infrastructure in the surrounding area to determine whether national and local requirements can be met.

Process

The availability of broadband infrastructure and the associated download speeds have been determined based on:

- A broadband coverage check for ten addresses near to the proposed development (including the proposed development) – available via the website of broadband infrastructure and service providers and identifies available speeds in any area within the UK. This includes the following broadband providers: Openreach, BT, Sky, Virgin Media, Hyperoptic, Open Fibre Networks (OFNL), and City Fibre (See Section 4).
- Consultation with broadband infrastructure providers and broadband infrastructure map checks (See Section 5).
- An investigation of the process for obtaining superfast broadband services (See Section 6).

Conclusions

Superfast broadband download speeds, understood to mean a minimum of 30 Mbps, are currently available at the proposed development location and all nine addresses near to the proposed development for at least one internet service provider.

Openreach FTTP infrastructure is not currently available at the proposed development location; however, a FTTP build is planned at this location between now and December 2026. For two of the nine addresses near to the proposed development, Openreach FTTP infrastructure was available. The seven remaining addresses only had access to either Fibre To The Cabinet (FTTC) and/or Asymmetric Digital Subscriber Line (ADSL) infrastructure. A review of the Openreach infrastructure map shows that there is Openreach infrastructure near to the proposed

¹ Outlined in Section 1.3.

development location. There are three cabinets located near to the proposed development. In order to determine the capability for Openreach to install FTTP infrastructure, site registration² is required.

Virgin Media provides broadband infrastructure in the form of FTTP and Hybrid Fibre-Coaxial (HFC)³ which allows for superfast service⁴. Four of the ten assessed addresses did have access to ultrafast services from Virgin Media. Services could not be confirmed⁵ as currently being available at the proposed development location. Services could not be confirmed or were not available at the remaining five locations. The proposed development and the remaining addresses may still have access to superfast services from Virgin Media⁶. A review of the infrastructure map shows that there is Virgin Media infrastructure near to the proposed development location. There are multiple cabinets located near to the proposed development. Virgin Media have confirmed that any formal statement will require site registration. Therefore, the capability for Virgin Media to install FTTP infrastructure could not be confirmed at this stage.

Hyperoptic currently provide FTTP infrastructure at the proposed development location and at five of the nine addresses near to the proposed development. Consultation with Hyperoptic has indicated that they partially utilise Openreach infrastructure⁷ to connect to the proposed development. Hyperoptic has confirmed that their FTTP infrastructure is available at the proposed development location.

OFNL and City Fibre do not provide FTTP infrastructure at or near to the proposed development location. Consultation with OFNL has also confirmed that they have no FTTP infrastructure at or near to the proposed development location.

Next Steps

To comply with policy JP-C2, as shown in Section 1.3, one or more of the site registration processes outlined below should be followed to ensure that FTTP is installed at the proposed development.

For new developments comprising more than 19 plots⁸, Openreach will install FTTP for free. Therefore, FTTP infrastructure will be available free of charge for this development subject to application to Openreach. The site registration process is discussed in Section 6.2.

The proposed development may benefit from superfast services from Virgin Media and site registration is recommended. If Virgin Media is contacted within a sufficient time frame and notified of the site plans^{9,10} it is possible that the proposed development will benefit from either

² <https://www.openreach.com/building-developers-and-projects/fibre-for-developers/registering-your-site>

³ Also known as 'Cable' broadband.

⁴ The type of infrastructure cannot be determined by the Virgin Media coverage checker.

⁵ Further information is required.

⁶ Some locations required further information or the postcode was not found.

⁷ [https://d2haref.openreach.co.uk/cpportal/products/passive-products/physical-infrastructure-access\(PIA\)](https://d2haref.openreach.co.uk/cpportal/products/passive-products/physical-infrastructure-access(PIA))

⁸ 'An individually Council Addressed property paying full residency council tax'

⁹ <https://www.virginmediapartners.com/developersnetworkexpansion>

¹⁰ <https://www.virginmedia.com/content/dam/virginmedia/dotcom/images/shop/downloads/New-Build-Handbook-v1-63.pdf>

FTTP or HFC broadband infrastructure supplied by Virgin Media. The developer will need to ensure that Virgin Media install FTTP infrastructure in order to comply with policy JP-C2 as shown in Section 1.3.

Hyperoptic already provides FTTP infrastructure at the proposed development location; however, it is recommended that site registration is completed in advance in order to facilitate the connection¹¹.

Other Alt Nets¹² can still be contacted in advance regarding the potential to install FTTP for new builds. Alt Nets may either lease a connection from Openreach or be willing to install their own network for a development with a large number of residential addresses. Details are provided in Section 6.4.

¹¹ <https://www.hyperoptic.com/broadband/property/new-build/#form>

¹² Alternative Networks (Alt Nets) is a term used to refer to alternative broadband infrastructure providers other than Openreach and Virgin Media.

LIST OF CONTENTS

Administration Page	2
Executive Summary	3
Report Purpose.....	3
Process	3
Conclusions	3
Next Steps	4
List of Contents	6
List of Figures.....	7
List of Tables.....	8
About Pager Power.....	9
1 Background	10
1.1 Introduction.....	10
1.2 National Planning Policy Framework (NPPF) – Section 10.....	10
1.3 Policy JP-C2: Digital Connectivity.....	10
2 Proposed Development Details	12
2.1 Description of Development	12
2.2 Proposed Development Site Plan and Location.....	12
3 Internet Services in the UK	14
3.1 Common Types of Broadband Infrastructure.....	14
3.2 Broadband Speed Terms.....	16
4 Broadband Connectivity Assessment.....	17
4.1 Overview.....	17
4.2 Coverage Checker Results.....	17
5 Consultation and Infrastructure Map Check.....	28
5.1 Overview.....	28
5.2 Consultation Overview	29
5.3 Broadband Infrastructure Maps.....	29
6 Facilitation of Superfast Internet Services	33

6.1	Overview.....	33
6.2	Openreach.....	33
6.3	Virgin Media.....	34
6.4	Other Internet Service Providers (Alt Nets).....	34
6.5	Data Ducting Infrastructure for New Homes.....	35
7	Conclusions.....	36
7.1	Conclusions.....	36
7.2	Next Steps.....	37
Appendix A – Example Documents for Site Submission		38
	Purpose	38
	Example Site Plan.....	38
	Example Site Plan with Plot Numbers	39
	Example Flat Floor Plan with Plot Numbers	40
	Example Site Plan for Business Unit	41
	Example Site Plan for Business Unit Plots.....	42
Appendix B – Data Ducting Infrastructure for New Homes		43
	Overview.....	43
	Internal Infrastructure Requirements Overview.....	43
	External Infrastructure Requirements Overview.....	44

LIST OF FIGURES

Figure 1	Proposed development site plan.....	12
Figure 2	Proposed development site boundary (red) – aerial image	13
Figure 3	Common types of broadband (fixed line).....	15
Figure 4	Locations assessed	18
Figure 6	Virgin Media infrastructure map	30
Figure 7	Hyperoptic infrastructure map	31
Figure 8	GTC-UK infrastructure map (including OFNL broadband infrastructure).....	32

LIST OF TABLES

Table 1 Assessment of current availability.....	27
Table 2 FTTP infrastructure providers consultation overview	29

ABOUT PAGER POWER

Pager Power is a dedicated consultancy company based in Suffolk, UK. The company has undertaken projects in 59 countries within Europe, Africa, America, Asia and Australasia.

The company comprises a team of experts to provide technical expertise and guidance on a range of planning issues for large and small developments.

Pager Power was established in 1997. Initially the company focus was on modelling the impact of wind turbines on radar systems. Over the years, the company has expanded into numerous fields including:

- Renewable energy projects;
- Building developments;
- Aviation and telecommunication systems.

Pager Power prides itself on providing comprehensive, understandable and accurate assessments of complex issues in line with national and international standards. This is underpinned by its custom software, longstanding relationships with stakeholders and active role in conferences and research efforts around the world.

Pager Power's assessments withstand legal scrutiny and the company can provide support for a project at any stage.

1 BACKGROUND

1.1 Introduction

There is a national requirement to ensure that new residences have access to superfast broadband download speeds (understood to mean a minimum of 30 Mbps). There is also a requirement in Manchester that all new development have Fibre To The Premises (FTTP)¹³ connections.

Pager Power has been commissioned to investigate the broadband connectivity at the proposed building development, located on Great Ancoats St, Manchester city centre. The proposed Stocktons development will consist of two building plots (A&B) which will contain a total of 903 residential apartments. This report presents an investigation into the current internet speeds and infrastructure in the surrounding area to determine whether national and local requirements can be met.

1.2 National Planning Policy Framework (NPPF) – Section 10

Section 10 of the NPPF (December 2024) also provides the following guidance, of which the most relevant extract is shown below.

‘119. 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.

Policies should set out how high quality digital infrastructure, providing access to services from a range of providers, is expected to be delivered and upgraded over time; and should prioritise full fibre connections to existing and new developments (as these connections will, in almost all cases, provide the optimum solution).’

1.3 Policy JP-C2: Digital Connectivity

The ‘Places for Everyone Joint Development Plan Document for Bolton, Bury, Manchester, Oldham, Rochdale, Salford, Tameside, Trafford And Wigan’¹⁴ was adopted in March 2024. The policy that relates to broadband connectivity is set out below.

‘We support the provision of affordable, high quality, digital infrastructure.

In making decisions we will support a range of measures, including:

- 1. Enabling the roll-out of latest generation mobile technology and full fibre to the premises connectivity, in a way that maximises coverage whilst protecting townscape quality and ensuring an ability to respond to updated/changing technology;*

¹³ Outlined in Section 1.3.

¹⁴ https://www.manchester.gov.uk/info/500113/city_centre_regeneration/8270/places_for_everyone

2. *Requiring all new development to have full fibre to premises connections, unless technically infeasible and/or unviable, and to incorporate multiple-ducting compliant with telecoms standards, to facilitate future-proof gigabit-capable network connections. It is expected that internet connections will be operational and immediately accessible to network providers when occupiers move into new properties and*
3. *Facilitating the provision of free, secure, high speed public wi-fi connections, particularly in the most frequented areas.'*

2 PROPOSED DEVELOPMENT DETAILS

2.1 Description of Development

The proposed Stocktons development will consist of two building plots (A&B) which will contain a total of 758 residential apartments and flexible commercial space.

2.2 Proposed Development Site Plan and Location

The proposed development site plan and location are shown in Figures 1¹⁵ and 2 below and on the following page.

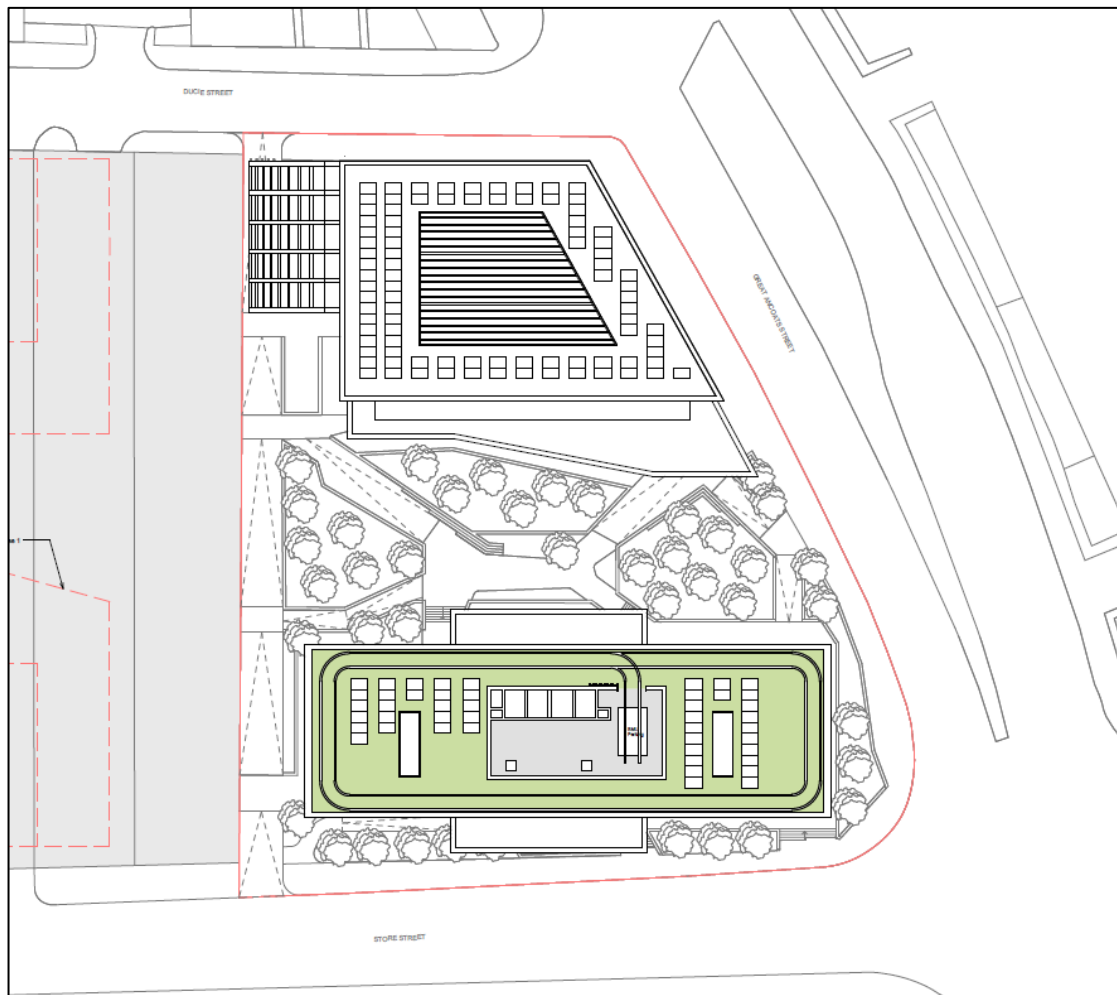


Figure 1 Proposed development site plan

¹⁵ Source: 10359-SHP-Z0-A-B5D9-G100-PL-RF-001.pdf



Figure 2 Proposed development site boundary (red) – aerial image

3 INTERNET SERVICES IN THE UK

3.1 Common Types of Broadband Infrastructure

Broadband services in the UK can be provided in various ways. Typical fixed-line broadband options include:

- Asymmetric Digital Subscriber Line (ADSL) – which is provided via a copper telephone line as shown in Figure 3 on the following page. ADSL infrastructure is owned and operated by Openreach¹⁶. Download speeds are typically up to 24 Mbps.
- Fibre optic broadband – which is provided via a bespoke fibre network. Fibre optic broadband typically provides the highest speeds in the UK and can be further subdivided into:
 - Fibre To The Cabinet (FTTC) – whereby a fibre connection is made between the exchange and a distribution point (typically referred to as a cabinet), which in turn is connected to a residence via a copper cable. FTTC infrastructure is typically owned and operated by Openreach¹⁷. Download speeds are typically up to 80 Mbps.
 - Fibre To The Premises¹⁸ (FTTP) – whereby a fibre connection is made throughout the connection between the exchange (or wider external network) and the residence. FTTP is understood to be the best form of broadband infrastructure and is considered to be ‘future proofed’ due to the potential for much faster speeds¹⁹. FTTP infrastructure providers in city centres typically include (but are not limited to): Openreach, Virgin Media, Hyperoptic, OFNL, and City Fibre. Download speeds are typically up to 1 Gbps²⁰.

¹⁶ <https://www.openreach.com/fibre-broadband>

¹⁷ <https://www.openreach.com/fibre-broadband/fttc-vs-ftp>

¹⁸ Also referred to as Fibre To The Home (FTTH).

¹⁹ <https://phys.org/news/2018-04-fiber-transmission.html>

²⁰ Source: Openreach. 1 Gbps = 1,000 Mbps.

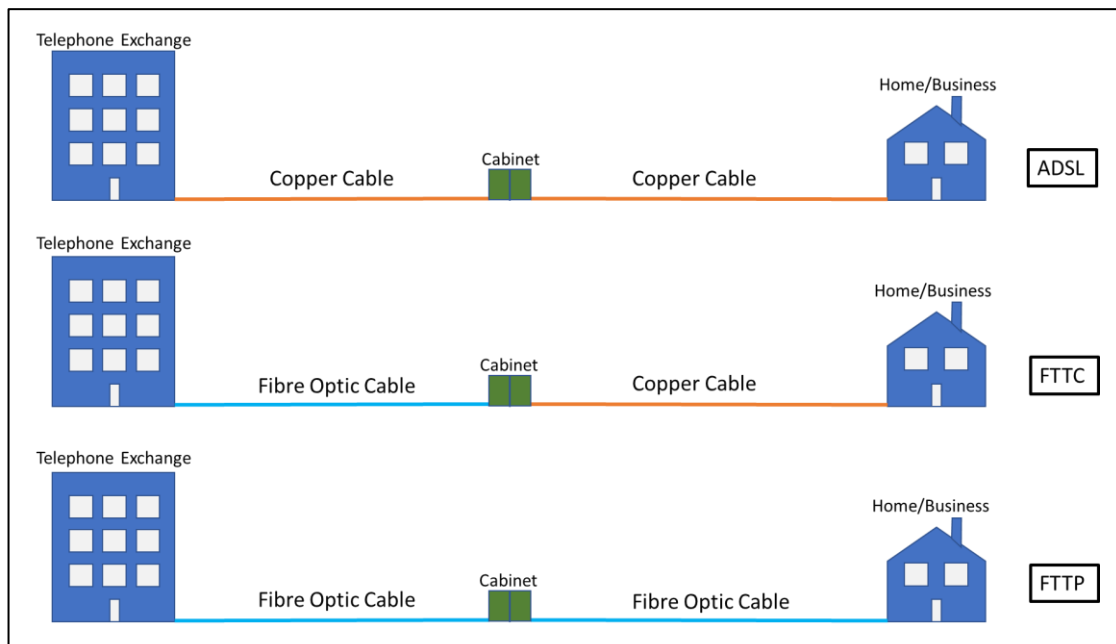


Figure 3 Common types of broadband (fixed line)

- Gfast – which is a hybrid technology used by Openreach that delivers broadband much like FTTC; however, the transmission is typically modified at the distribution point to increase the speed of the service. Download speeds are typically up to 330 Mbps²¹.
- Hybrid Fibre-Coaxial (HFC)²² – typically provided by Virgin Media²³ who make the use of DOCSIS technology²⁴ standard whereby typically there is a fibre connection made up to a distribution point (similar to FTTC), which in turn is connected to a residence via coaxial cable. Download speeds are typically up to 1,130 Mbps²⁵.

Wireless Broadband services are available in the UK; however, are less common. Typical wireless options include:

- Fixed Wireless Access (typically offered by small internet service providers to rural locations) whereby a fibre connection is made up to a distribution point, which in turn is connected to a residence via wireless technology (typically WI-FI). Download speeds vary depending on the provider. 'Alt net' fixed wireless access providers have included County Broadband and Voneus²⁶. For example, County Broadband have previously provided download speeds of up to 32 Mbps for fixed wireless access services.
- Mobile network providers can also provide wireless home broadband via 4G/5G technology and may be sought as another alternative solution. In the UK, Mobile 4G/5G

²¹ <https://www.openreach.com/fibre-broadband/gfast-fibre-broadband>

²² Also known as 'Cable' broadband.

²³ Virgin Media now also provide FTTP solutions in the UK for home broadband services dependent on the location.

²⁴ Data Over Cable Service Interface Specification - An international standard for data transfer over cable.

²⁵ <https://www.virginmedia.com/shop/broadband/speeds>

²⁶ County Broadband and Voneus now also provide FTTP solutions in the UK for home broadband services dependent on the location.

infrastructure is operated by EE, Virgin Media O2, Vodafone, and Three UK. Download speeds may vary depending on the provider. For example, EE provides an average 5G download speed of 146Mbps and 4G at 40 Mbps²⁷.

- Satellite internet services are very uncommon and used only in very remote rural areas typically where no alternative viable solutions are available. Satellite internet services are typically of a very low download speed e.g. less than 1Mbps. Latency has also been a key limitation due to the distance involved. More recently, satellite internet services have improved, with Starlink providing typical download speeds of between 25 and 220 Mbps²⁸.

3.2 Broadband Speed Terms

The term 'superfast' is understood to mean speeds of 30 Mbps or higher²⁹. Broadband speed terms are as follows³⁰:

- Standard broadband – download speeds of less than 30 Mbps.
- Superfast broadband – download speed of at least 30 Mbps.
- Ultrafast broadband – download speeds of at least 300 Mbps.

²⁷ <https://ee.co.uk/broadband/mobile-broadband>

²⁸ <https://www.starlink.com/legal/documents/DOC-1400-28829-70>

²⁹ <https://commonslibrary.parliament.uk/research-briefings/sn06643/>

³⁰ <https://checker.ofcom.org.uk/en-gb/about-checker#broadband>

4 BROADBAND CONNECTIVITY ASSESSMENT

4.1 Overview

The availability of broadband infrastructure and the associated download speeds have been determined based on:

- A broadband coverage check³¹ for ten addresses near to the proposed development (including the proposed development) – available via the website of broadband infrastructure and service providers and identifies available speeds³² in any area within the UK. This includes the following broadband providers: Openreach, BT, Sky, Virgin Media, Hyperoptic, OFNL, and City Fibre³³ (See Section 4.2).
- Consultation with broadband infrastructure providers and broadband infrastructure map checks (See Section 5).
- An investigation of the process for obtaining superfast broadband services (See Section 6).

4.2 Coverage Checker Results

In total, ten addresses near to the proposed development (including the proposed development) were assessed, as shown by the blue icons in Figure 4 on the following page. Locations near to the proposed development are also checked because it can provide further reassurances as to the likelihood of services being available at the proposed development and, furthermore, coverage checkers may not be entirely accurate³⁴. The results are shown in Table 1 on pages 19 to 27.

³¹ Openreach provide details regarding the type of infrastructure that is available as well as the download speed. The download speeds that BT and Sky provide should reflect the results of the Openreach checker; however, this is not always the case and hence a cross-check is completed. Virgin Media only provide results regarding the download speed that is available and do not provide details regarding the type of infrastructure (i.e. HFC vs FTTP). Hyperoptic, OFNL, and City Fibre are solely FTTP providers, where available.

³² Some also provide information regarding the type of infrastructure.

³³ Other broadband providers may be available. Openreach are an open network that is sold by services providers such as BT and Sky. Virgin Media typically own and operate their own infrastructure and are considered a closed network. Hyperoptic, OFNL, and City Fibre typically provide Fibre To The Premises (FTTP) infrastructure in City Centres.

³⁴ Contacting a service provider directly may reveal that services can be connected.

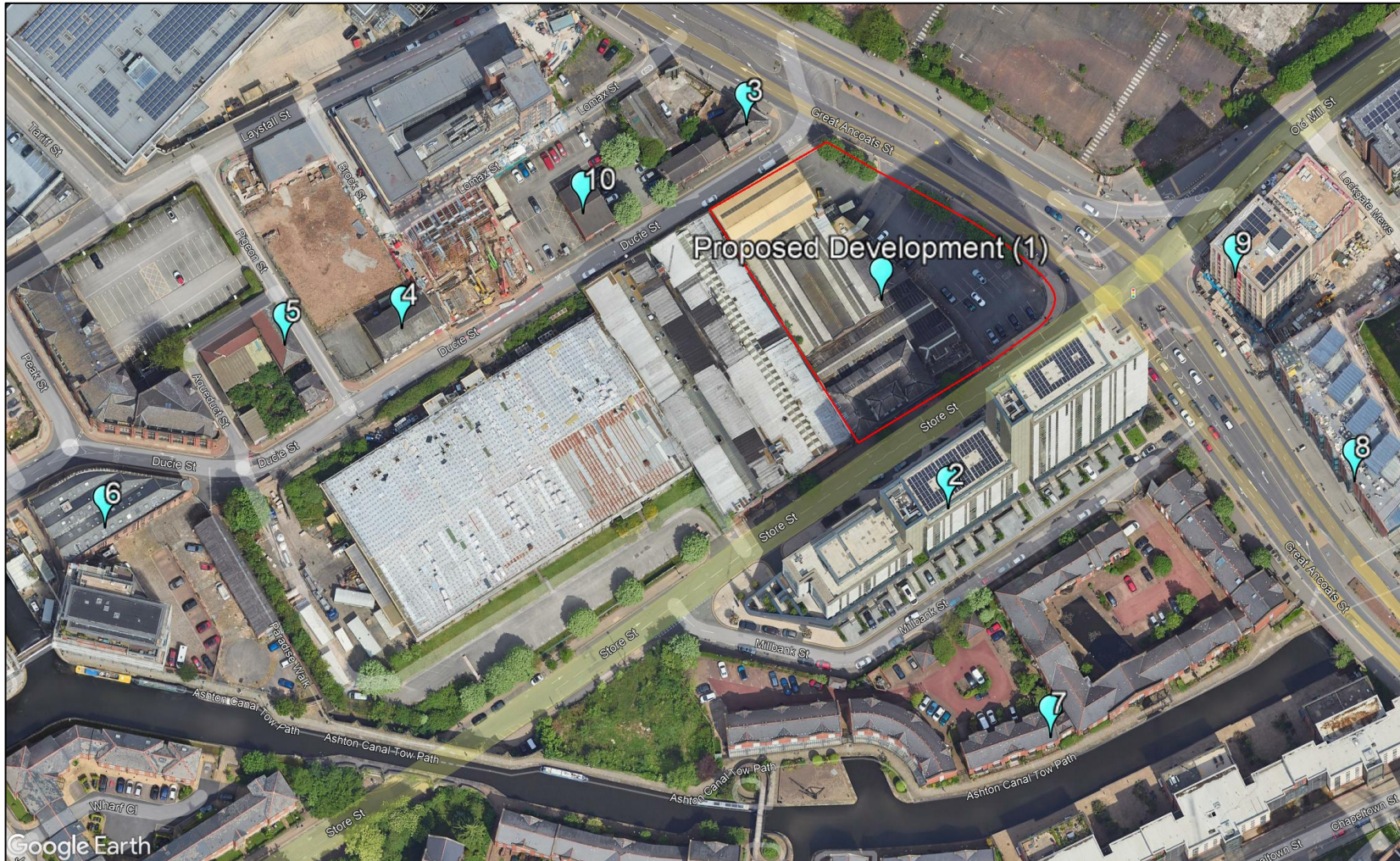


Figure 4 Locations assessed

Location	Openreach	BT (Openreach Network)	Sky (Openreach Network)	Virgin Media	Hyperoptic	OFNL	City Fibre	Conclusion
1 (Proposed development location). (A R Stockton & Co Ltd, 140, Great Ancoats St, Manchester, M4 6DU)	Standard broadband. Download speeds of up to 24 Mbps. ADSL infrastructure. Build is planned between now and December 2026. Download speeds of up to 1,800 Mbps will become available. FTTP infrastructure will be available. No 'Superfast' service currently available. 'Ultrafast' service will potentially become available at or near to the development location by December 2026. FTTP infrastructure will be available.	Standard broadband. Download speeds of 5-11 Mbps. ADSL infrastructure. 4G Home broadband with a maximum speed of 30Mb is available. No 'Superfast' service or FTTP infrastructure available.	No services are currently available. No 'Superfast' service or FTTP infrastructure available.	Services could not be confirmed for this address. 'Superfast' service or FTTP infrastructure availability could not be confirmed.	Ultrafast broadband. Download speeds at an average of 900 Mbps are available. FTTP infrastructure will be available. 'Ultrafast' service and FTTP infrastructure is available.	No services are currently available. No 'Superfast' service or FTTP infrastructure available.	No services are currently available. No 'Superfast' service or FTTP infrastructure available.	'Ultrafast' service available. FTTP infrastructure is available from Hyperoptic and will be available from Openreach by December 2026.

Location	Openreach	BT (Openreach Network)	Sky (Openreach Network)	Virgin Media	Hyperoptic	OFNL	City Fibre	Conclusion
2. (A705 Oxygen, Store Street, Manchester, M1 2WA)	Superfast broadband. Download speeds of 34-52 Mbps. FTTC infrastructure. 'Superfast' service available. No FTTP infrastructure available.	Standard broadband. Download speeds of 31-36 Mbps. Minimum download speed guarantee of 25 Mbps. FTTC infrastructure. No 'Superfast' service or FTTP infrastructure available.	Superfast broadband. Download speeds with an average of 32-37 Mbps. Minimum download speed guarantee of 31 Mbps. FTTC infrastructure. 'Superfast' service available. No FTTP infrastructure available.	Services could not be confirmed for this address. 'Superfast' service or FTTP infrastructure availability could not be confirmed.	Services could not be confirmed for this address. 'Superfast' service or FTTP infrastructure availability could not be confirmed.	No services are currently available. No 'Superfast' service or FTTP infrastructure available.	Services could not be confirmed for this address. 'Superfast' service or FTTP infrastructure availability could not be confirmed.	'Superfast' service available. FTTP infrastructure is not currently available.

Location	Openreach	BT (Openreach Network)	Sky (Openreach Network)	Virgin Media	Hyperoptic	OFNL	City Fibre	Conclusion
3. (132-134, Great Ancoats St, Manchester M4 6DE)	Superfast broadband. Download speeds of 40-57 Mbps. FTTC infrastructure. 'Superfast' service available. FTTP not available.	Superfast broadband. Download speeds with an average of 36-50 Mbps. Minimum speed guarantee of 30 Mbps. FTTC infrastructure. 'Superfast' service available. FTTP not available.	Superfast broadband. Download speeds with an average of 40-55 Mbps. Minimum speed guarantee of 37 Mbps. FTTC infrastructure. 'Superfast' service available. FTTP not available.	Ultrafast broadband. Download speeds at an average of 1,130 Mbps are available. 'Ultrafast' service available. FTTP vs Hybrid Fibre-Coaxial (HFC) infrastructure cannot be confirmed.	Ultrafast broadband. Download speeds at an average of 900 Mbps are available. FTTP infrastructure will be available. 'Ultrafast' service and FTTP infrastructure is available.	No services are currently available. No 'Superfast' service or FTTP infrastructure available.	No services are currently available. No 'Superfast' service or FTTP infrastructure available.	'Ultrafast' service available. FTTP infrastructure is available from Hyperoptic.

Location	Openreach	BT (Openreach Network)	Sky (Openreach Network)	Virgin Media	Hyperoptic	OFNL	City Fibre	Conclusion
4. (51-53, Ducie Street, Manchester, M1 2JQ)	Superfast broadband. Download speeds of 32-45 Mbps. FTTC infrastructure. 'Superfast' service available. FTTP not available.	Superfast broadband. Download speeds with an average of 29-36 Mbps. Minimum speed guarantee of 25 Mbps. FTTC infrastructure. No 'Superfast' service or FTTP infrastructure available.	Superfast broadband. Download speeds with an average of 32-37 Mbps. Minimum speed guarantee of 30 Mbps. FTTC infrastructure. 'Superfast' service available. FTTP not available.	Ultrafast broadband. Download speeds at an average of 1,130 Mbps are available. 'Ultrafast' service available. FTTP vs Hybrid Fibre-Coaxial (HFC) infrastructure cannot be confirmed.	Ultrafast broadband. Download speeds at an average of 900 Mbps are available. FTTP infrastructure will be available. 'Ultrafast' service and FTTP infrastructure is available.	No services are currently available. No 'Superfast' service or FTTP infrastructure available.	No services are currently available. No 'Superfast' service or FTTP infrastructure available.	'Ultrafast' service available. FTTP infrastructure is available from Hyperoptic.

Location	Openreach	BT (Openreach Network)	Sky (Openreach Network)	Virgin Media	Hyperoptic	OFNL	City Fibre	Conclusion
5. (10, Pigeon Street, Manchester, M1 2JX)	Superfast broadband. Download speeds of 32-46 Mbps. FTTC infrastructure. 'Superfast' service available. FTTP not available.	Superfast broadband. Download speeds with an average of 29-36 Mbps. Minimum speed guarantee of 24 Mbps. FTTC infrastructure. No 'Superfast' service or FTTP infrastructure available.	Superfast broadband. Download speeds with an average of 32-37 Mbps. Minimum speed guarantee of 30 Mbps. FTTC infrastructure. 'Superfast' service available. FTTP not available.	Services could not be confirmed for this address. 'Superfast' service or FTTP infrastructure availability could not be confirmed.	No services are currently available. Hyperoptic state on their website that they are bringing full fibre network in the area. No specified timescale is provided. No 'Superfast' service or FTTP infrastructure available.	No services are currently available. No 'Superfast' service or FTTP infrastructure available.	No services are currently available. No 'Superfast' service or FTTP infrastructure available.	'Superfast' service available. No FTTP infrastructure available; however, Hyperoptic state that FTTP is being rolled out in the area. No specified timescale is provided.

Location	Openreach	BT (Openreach Network)	Sky (Openreach Network)	Virgin Media	Hyperoptic	OFNL	City Fibre	Conclusion
6. (Junction Works, 40 Ducie Street, Manchester, M1 2DF)	Standard broadband. Download speeds of 24 Mbps. ADSL infrastructure. No 'Superfast' service or FTTP infrastructure available.	Standard broadband. Download speeds of 4-9 Mbps. ADSL infrastructure. 4G Home broadband with a maximum speed of 30Mb is available. No 'Superfast' service or FTTP infrastructure available.	No services are currently available. No 'Superfast' service or FTTP infrastructure available.	Ultrafast broadband. Download speeds at an average of 1,130 Mbps are available. 'Ultrafast' service available. FTTP vs Hybrid Fibre-Coaxial (HFC) infrastructure cannot be confirmed.	No services are currently available. Hyperoptic state on their website that they are bringing full fibre network in the area. No specified timescale is provided. No 'Superfast' service or FTTP infrastructure available.	No services are currently available. No 'Superfast' service or FTTP infrastructure available.	No services are currently available. No 'Superfast' service or FTTP infrastructure available.	'Ultrafast' service available. FTTP infrastructure availability could not be confirmed; however, Hyperoptic state that FTTP is being rolled out in the area. No specified timescale is provided.

Location	Openreach	BT (Openreach Network)	Sky (Openreach Network)	Virgin Media	Hyperoptic	OFNL	City Fibre	Conclusion
7. (1 James Brindley Basin, Manchester M1 2NL)	Standard broadband. Download speeds of 24 Mbps. ADSL infrastructure. No 'Superfast' service or FTTP infrastructure available.	Ultrafast broadband. Download speeds with an average of 900 Mbps. Minimum speed guarantee of 700 Mbps. FTTP infrastructure. 'Ultrafast' service and FTTP infrastructure may available.	Ultrafast broadband. Download speeds with an average of 780-930 Mbps. Minimum speed guarantee of 600 Mbps. FTTP infrastructure. 'Ultrafast' service and FTTP infrastructure may available.	Services could not be confirmed for this address. 'Superfast' service or FTTP infrastructure availability could not be confirmed.	No services are currently available. Hyperoptic state on their website that they are bringing full fibre network in the area. No specified timescale is provided. No 'Superfast' service or FTTP infrastructure available.	No services are currently available. No 'Superfast' service or FTTP infrastructure available.	No services are currently available. No 'Superfast' service or FTTP infrastructure available.	'Ultrafast' service available. FTTP infrastructure may available from Openreach due to the results for BT and Sky.

Location	Openreach	BT (Openreach Network)	Sky (Openreach Network)	Virgin Media	Hyperoptic	OFNL	City Fibre	Conclusion
8. (Apartment 1, 151 Great Ancoats Street, Manchester, M4 6DH)	Standard broadband. Download speeds of 24 Mbps. ADSL infrastructure. No 'Superfast' service or FTTP infrastructure available.	Standard broadband. Download speeds of 1-5 Mbps. ADSL infrastructure. 4G Home broadband with a maximum speed of 30Mb is available. No 'Superfast' service or FTTP infrastructure available.	No services are currently available. No 'Superfast' service or FTTP infrastructure available.	Ultrafast broadband. Download speeds at an average of 1,130 Mbps are available. 'Ultrafast' service available. FTTP vs Hybrid Fibre-Coaxial (HFC) infrastructure cannot be confirmed.	Ultrafast broadband. Download speeds at an average of 900 Mbps are available. FTTP infrastructure will be available. 'Ultrafast' service and FTTP infrastructure is available.	No services are currently available. No 'Superfast' service or FTTP infrastructure available.	No services are currently available. No 'Superfast' service or FTTP infrastructure available.	'Ultrafast' service available. FTTP infrastructure is available from Hyperoptic.

Location	Openreach	BT (Openreach Network)	Sky (Openreach Network)	Virgin Media	Hyperoptic	OFNL	City Fibre	Conclusion
9. (Flat 101, 4, William Sutton Building, Old Mill Street, Manchester, M4 6NA)	Ultrafast broadband. Download speeds of 1,800 Mbps. FTTP infrastructure. 'Ultrafast' service and FTTP infrastructure is available.	Ultrafast broadband. Download speeds with an average of 900 Mbps. Minimum speed guarantee of 700 Mbps. FTTP infrastructure. 'Ultrafast' service and FTTP infrastructure is available.	Ultrafast broadband. Download speeds with an average of 780-930 Mbps. Minimum speed guarantee of 600 Mbps. FTTP infrastructure. 'Ultrafast' service and FTTP infrastructure is available.	No services are currently available. No 'Superfast' service or FTTP infrastructure available.	Ultrafast broadband. Download speeds at an average of 900 Mbps are available. FTTP infrastructure will be available. 'Ultrafast' service and FTTP infrastructure is available.	No services are currently available. No 'Superfast' service or FTTP infrastructure available.	No services are currently available. No 'Superfast' service or FTTP infrastructure available.	'Ultrafast' service available. FTTP infrastructure is available from Openreach.
10. (65-67 Ducie Street, Manchester, M1 2JQ)	Superfast broadband. Download speeds of 35-55 Mbps. FTTC infrastructure. 'Superfast' service available. FTTP not available.	Superfast broadband. Download speeds with an average of 32-36 Mbps. Minimum speed guarantee of 28 Mbps. FTTC infrastructure. No 'Superfast' service or FTTP infrastructure available.	Superfast broadband. Download speeds with an average of 37-50 Mbps. Minimum speed guarantee of 32 Mbps. FTTC infrastructure. 'Superfast' service available. FTTP not available.	Services could not be confirmed for this address. 'Superfast' service or FTTP infrastructure availability could not be confirmed.	Ultrafast broadband. Download speeds at an average of 900 Mbps are available. FTTP infrastructure will be available. 'Ultrafast' service and FTTP infrastructure is available.	No services are currently available. No 'Superfast' service or FTTP infrastructure available.	No services are currently available. No 'Superfast' service or FTTP infrastructure available.	'Ultrafast' service available. FTTP infrastructure is available from Hyperoptic.

Table 1 Assessment of current availability

5 CONSULTATION AND INFRASTRUCTURE MAP CHECK

5.1 Overview

Consultation was undertaken directly with the most prevalent FTTP infrastructure providers³⁵ in order to provide an indication of the expected availability and capability to install FTTP at the proposed development location.

Some broadband infrastructure providers may share an infrastructure coverage map with details regarding external planned/live broadband infrastructure, which also may include details of the nearest of any of the following:

- Duct/Trench.
- Camber/Pole.
- Cabinet.
- Primary Connection Point (PCP).
- Box.
- Manhole.

This information is relevant because it can provide an indication of how close the nearest fibre connection and therefore the capability to extend the fibre network to the development location.

³⁵<https://www.ispreview.co.uk/index.php/2024/03/top-30-full-fibre-providers-by-share-of-uk-new-build-homes-2023-24.html>

5.2 Consultation Overview

Table 2 below presents a summary of the consultation to date.

Stakeholder	Summary
Openreach	09/09/24 – FTTP infrastructure capability requested. 10/09/24 – Openreach provided information regarding how to obtain infrastructure maps. In order to determine the capability for Openreach to install FTTP infrastructure, site registration ³⁶ is required.
Virgin Media	09/09/24 – FTTP infrastructure capability requested. 09/09/24 – Virgin Media advises registering the site ³⁷ in order to obtain a feasibility study which will enable them to provide confirmation of their availability and capability to install FTTP. 09/09/24 – Virgin Media infrastructure map requested. 09/09/24 – Virgin Media infrastructure map provided. 09/09/24 – FTTP infrastructure capability requested. Virgin Media have confirmed that any formal statement will require site registration. Therefore, the capability for Virgin Media to install FTTP infrastructure could not be confirmed at this stage.
Hyperoptic	09/09/24 – FTTP infrastructure capability requested. 11/09/24 – FTTP infrastructure confirmed at proposed development location (140, Great Ancoats St, Manchester, M4 6DU).
OFNL	09/09/24 – FTTP infrastructure capability requested. 10/09/24 – Infrastructure map provided. No FTTP infrastructure confirmed at or near to the proposed development location (140, Great Ancoats St, Manchester, M4 6DU).

Table 2 FTTP infrastructure providers consultation overview

5.3 Broadband Infrastructure Maps

Figures 5 to 7 on the following pages provide information regarding the surrounding broadband infrastructure for Openreach, Virgin Media, Hyperoptic, and OFNL³⁸.

³⁶ <https://www.openreach.com/building-developers-and-projects/fibre-for-developers/registering-your-site>

³⁷ <https://www.virginmediapartners.com/developersnetworkexpansion>

³⁸ Copyright © Openreach, Virgin Media, Hyperoptic, GTC-UK, and OFNL.

5.3.1 Openreach

The infrastructure map shows that there is Openreach infrastructure near to the proposed development location. There are three cabinets located near to the proposed development. Two cabinets are located approximately 50m to the southeast on the opposite side of Great Ancoats Street and one cabinet is located on Millbank Street. The Openreach map has not been shown within this report due to the terms of use.

5.3.2 Virgin Media

The infrastructure map shows that there is Virgin Media infrastructure near to the proposed development location. There are multiple cabinets located near to the proposed development. For example, there are cabinets approximately 70m to the east on Old Mill Street, 55m to the southwest on the corner of Millbank Street, and 150m to the west on Ducie Street.

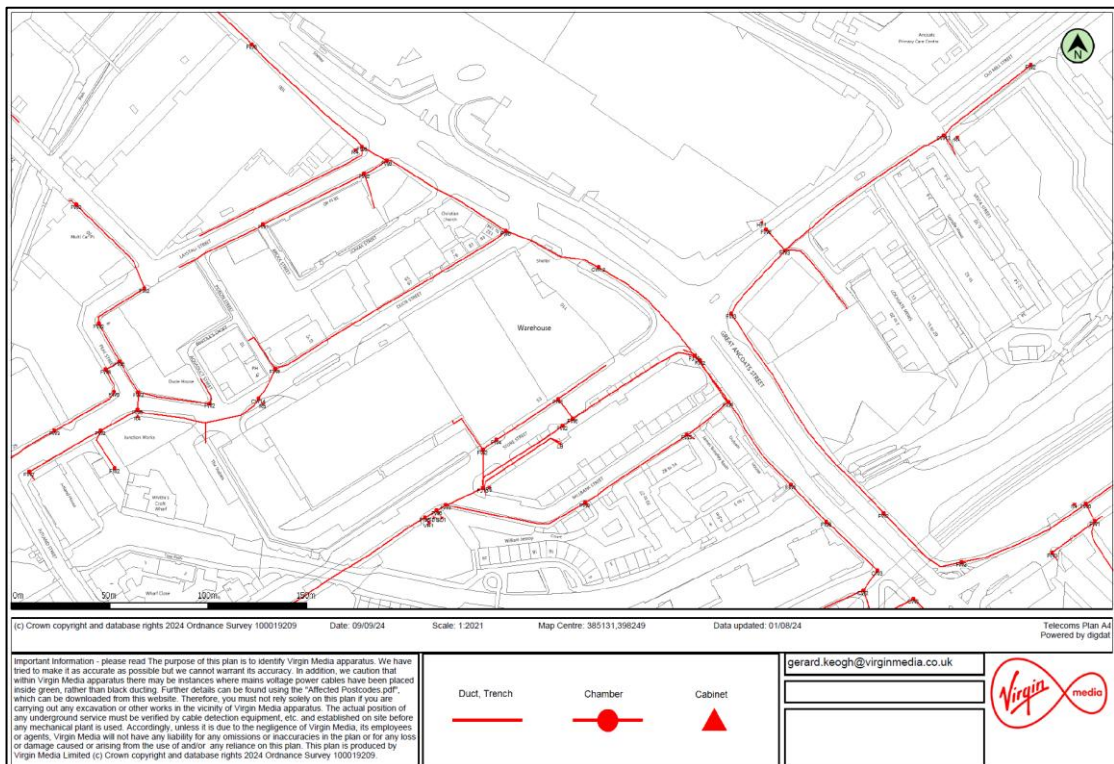


Figure 5 Virgin Media infrastructure map

5.3.3 Hyperoptic

Consultation with Hyperoptic has indicated that they partially utilise Openreach infrastructure³⁹ to connect to the proposed development. Hyperoptic has confirmed that their FTTP infrastructure is available at the proposed development location.

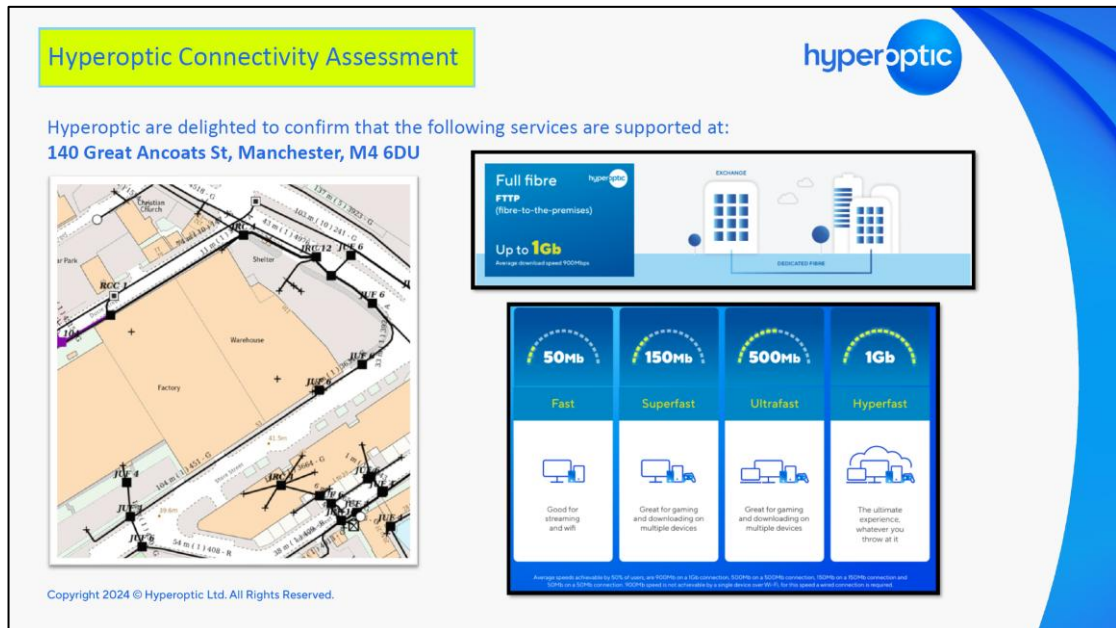


Figure 6 Hyperoptic infrastructure map

³⁹ [https://d2haref.openreach.co.uk/cpportal/products/passive-products/physical-infrastructure-access\(PIA\)](https://d2haref.openreach.co.uk/cpportal/products/passive-products/physical-infrastructure-access(PIA))

5.3.4 OFNL

OFNL have confirmed that they have no FTTP infrastructure at or near to the proposed development location.

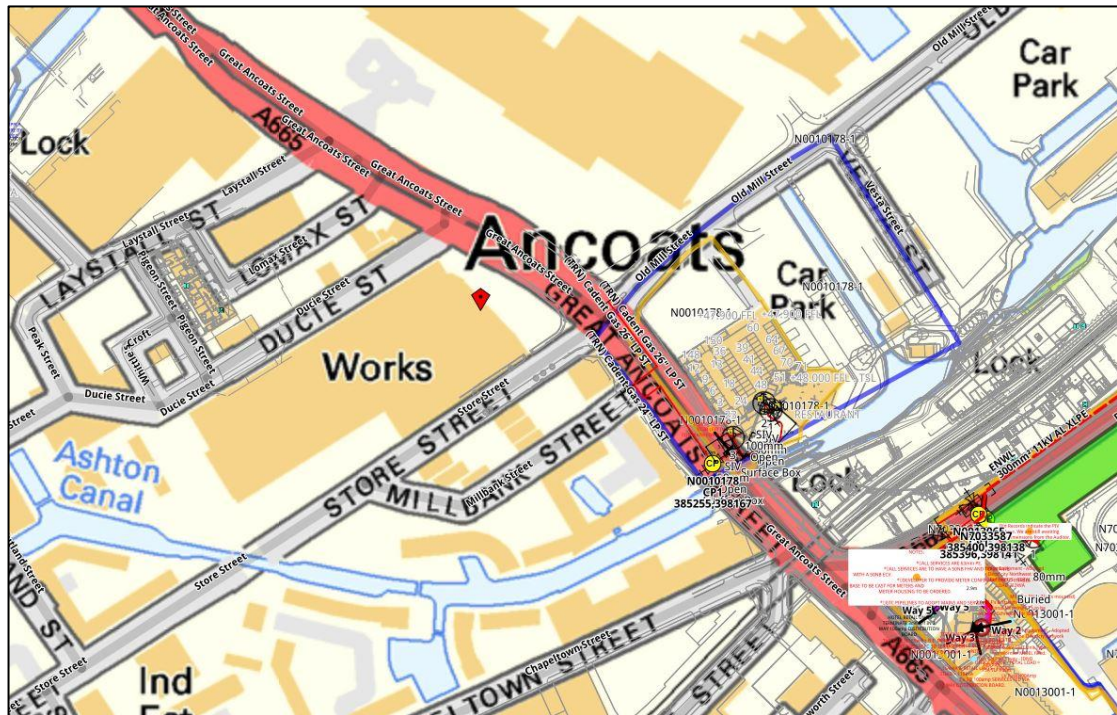


Figure 7 GTC-UK infrastructure map (including OFNL broadband infrastructure)

6 FACILITATION OF SUPERFAST INTERNET SERVICES

6.1 Overview

The process of obtaining superfast services is outlined in Sections 6.2 to 6.4. Provided one or more of these processes are followed, superfast services can be made available for the proposed development.

An overview of guidance on data ducting infrastructure for new homes is outlined in Section 6.5 and Appendix B.

6.2 Openreach

The proposed development will benefit from the option of FTTP from Openreach. The benefit of FTTP over FTTC is that internet speeds are typically faster, and the network has a greater capacity for higher speeds in the future, whilst it is also considered to be more reliable and consistent⁴⁰. The process and the cost of doing this varies depending on the development type and size. For developments comprising more than 19 plots, Openreach will install FTTP for free. A 'plot' in this context is defined as '*an individually Council Addressed property paying full residency council tax*'⁴¹. The proposed development will therefore qualify for free facilitation of the fibre network from the exchange to the properties themselves. This requires registration of the site, specifically:

- Registration is required six months before the provision of the service to the first property and eight weeks before development commences on site.
- The dates of commencement on site and required service must be provided.
- A description of the development including the number of plots and whether it is part of a larger development with associated phases.
- Contact details for the company building the properties and the person managing any queries from Openreach must be provided.
- Plans for the development must be provided including:
 - Location.
 - Site plan at a minimum of 1:500.
 - Schedule of accommodation that shows how many plots per floor and their connection to a riser in cases of multiple cores.
- Registration is undertaken online⁴², whereupon it will be assessed by the Openreach team. The timescale for this assessment is not defined, with the customer service team advising that this varies according to the number of applications being processed at any

⁴⁰ Internet latency is typically lower for FTTP and internet speeds are usually more consistent.

⁴¹ The definition was provided during an engagement with Openreach customer support carried out in 2018 it can also be found at the following link: <https://www.openreach.com/fibre-broadband/fibre-for-developers/registering-your-site>.

⁴² <https://www.developers.openreach.co.uk/developerportal/index>

given time, however a response from the assessment team should be received within five working days from submission of the registration form.

- Following assessment of the registration documents, an agreement will be provided by Openreach, which must be signed and returned so that the application can be progressed by Openreach. This stage is not required if a framework agreement between the developer and Openreach has already been signed.
- Once the agreement has been signed, it will be processed by the Openreach planning team, who will coordinate the connection process based on the development timescales.

6.3 Virgin Media

The proposed development may benefit from superfast services from Virgin Media and site registration is recommended. Although the coverage checkers for locations near the proposed development indicated mixed results regarding the availability of services from Virgin Media, a review of the infrastructure map shows that there is Virgin Media infrastructure near to the proposed development location. If Virgin Media is contacted within a sufficient time frame and notified of the site plans^{43,44} it is possible that the proposed development will benefit from either FTTP or Hybrid Fibre-Coaxial broadband infrastructure supplied by Virgin Media. The developer will need to ensure that Virgin Media install FTTP infrastructure in order to comply with policy JP-C2 as shown in Section 1.3.

6.4 Other Internet Service Providers (Alt Nets)

Alt Nets⁴⁵ can be contacted in advance regarding the potential to install FTTP for new builds. In particular, Hyperoptic already provides FTTP infrastructure at the proposed development location; however, it is recommended that site registration is completed in advance in order to facilitate the connection.

Alt Nets may either lease a connection from Openreach or be willing to install their own network for a development with a large number of residential addresses. Details are provided below.

- Hyperoptic: <https://www.hyperoptic.com/broadband/property/new-build/#form>
- OFNL:
 - <https://www.ofnl.co.uk/make-a-request/>
 - <https://portal.ofnl.co.uk/contactform>
- City Fibre: <https://cityfibre.com/>

⁴³ <https://www.virginmediapartners.com/developersnetworkexpansion>

⁴⁴ <https://www.virginmedia.com/content/dam/virginmedia/dotcom/images/shop/downloads/New-Build-Handbook-v1-63.pdf>

⁴⁵ Alt Nets is a term used to refer to alternative broadband infrastructure providers other than Openreach and Virgin Media.

6.5 Data Ducting Infrastructure for New Homes

Advice on infrastructure (internal and external) to ensure superfast services are installed for the proposed development is most likely to be provided by Openreach⁴⁶, Virgin Media⁴⁷, or other internet infrastructure stakeholders alongside the site registration and consultation as outlined in the previous sections. A guidance note titled '*Data Ducting Infrastructure for New Homes (March 2008)*⁴⁸' produced by the Ministry of Housing, Communities & Local Government also provides advice on internal and external infrastructure. An overview of this document is shown in Appendix B.

⁴⁶ <https://www.openreach.com/broadband-for-developers>

⁴⁷ <https://www.virginmedia.com/content/dam/virginmedia/dotcom/images/shop/downloads/New-Build-Handbook-v1-63.pdf>

⁴⁸ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/11496/dataducting.pdf

7 CONCLUSIONS

7.1 Conclusions

Superfast broadband download speeds, understood to mean a minimum of 30 Mbps, are currently available at the proposed development location and all nine addresses near to the proposed development for at least one internet service provider.

Openreach FTTP infrastructure is not currently available at the proposed development location; however, a FTTP build is planned at this location between now and December 2026. For two of the nine addresses near to the proposed development, Openreach FTTP infrastructure was available. The seven remaining addresses only had access to either Fibre To The Cabinet (FTTC) and/or Asymmetric Digital Subscriber Line (ADSL) infrastructure. A review of the Openreach infrastructure map shows that there is Openreach infrastructure near to the proposed development location. There are three cabinets located near to the proposed development. In order to determine the capability for Openreach to install FTTP infrastructure, site registration⁴⁹ is required.

Virgin Media provides broadband infrastructure in the form of FTTP and Hybrid Fibre-Coaxial (HFC)⁵⁰ which allows for superfast service⁵¹. Four of the ten assessed addresses did have access to ultrafast services from Virgin Media. Services could not be confirmed⁵² as currently being available at the proposed development location. Services could not be confirmed or were not available at the remaining five locations. The proposed development and the remaining addresses may still have access to superfast services from Virgin Media⁵³. A review of the infrastructure map shows that there is Virgin Media infrastructure near to the proposed development location. There are multiple cabinets located near to the proposed development. Virgin Media have confirmed that any formal statement will require site registration. Therefore, the capability for Virgin Media to install FTTP infrastructure could not be confirmed at this stage.

Hyperoptic currently provide FTTP infrastructure at the proposed development location and at five of the nine addresses near to the proposed development. Consultation with Hyperoptic has indicated that they partially utilise Openreach infrastructure⁵⁴ to connect to the proposed development. Hyperoptic has confirmed that their FTTP infrastructure is available at the proposed development location.

OFNL and City Fibre do not provide FTTP infrastructure at or near to the proposed development location. Consultation with OFNL has also confirmed that they have no FTTP infrastructure at or near to the proposed development location.

⁴⁹ <https://www.openreach.com/building-developers-and-projects/fibre-for-developers/registering-your-site>

⁵⁰ Also known as 'Cable' broadband.

⁵¹ The type of infrastructure cannot be determined by the Virgin Media coverage checker.

⁵² Further information is required.

⁵³ Some locations required further information or the postcode was not found.

⁵⁴ [https://d2haref.openreach.co.uk/cpportal/products/passive-products/physical-infrastructure-access\(PIA\)](https://d2haref.openreach.co.uk/cpportal/products/passive-products/physical-infrastructure-access(PIA))

7.2 Next Steps

To comply with policy JP-C2, as shown in Section 1.3, one or more of the site registration processes outlined below should be followed to ensure that FTTP is installed at the proposed development.

For new developments comprising more than 19 plots⁵⁵, Openreach will install FTTP for free. Therefore, FTTP infrastructure will be available free of charge for this development subject to application to Openreach. The site registration process is discussed in Section 6.2.

The proposed development may benefit from superfast services from Virgin Media and site registration is recommended. If Virgin Media is contacted within a sufficient time frame and notified of the site plans^{56,57} it is possible that the proposed development will benefit from either FTTP or HFC broadband infrastructure supplied by Virgin Media. The developer will need to ensure that Virgin Media install FTTP infrastructure in order to comply with policy JP-C2 as shown in Section 1.3.

Hyperoptic already provides FTTP infrastructure at the proposed development location; however, it is recommended that site registration is completed in advance in order to facilitate the connection⁵⁸.

Other Alt Nets⁵⁹ can still be contacted in advance regarding the potential to install FTTP for new builds. Alt Nets may either lease a connection from Openreach or be willing to install their own network for a development with a large number of residential addresses. Details are provided in Section 6.4.

⁵⁵ 'An individually Council Addressed property paying full residency council tax'

⁵⁶ <https://www.virginmediapartners.com/developersnetworkexpansion>

⁵⁷ <https://www.virginmedia.com/content/dam/virginmedia/dotcom/images/shop/downloads/New-Build-Handbook-v1-63.pdf>

⁵⁸ <https://www.hyperoptic.com/broadband/property/new-build/#form>

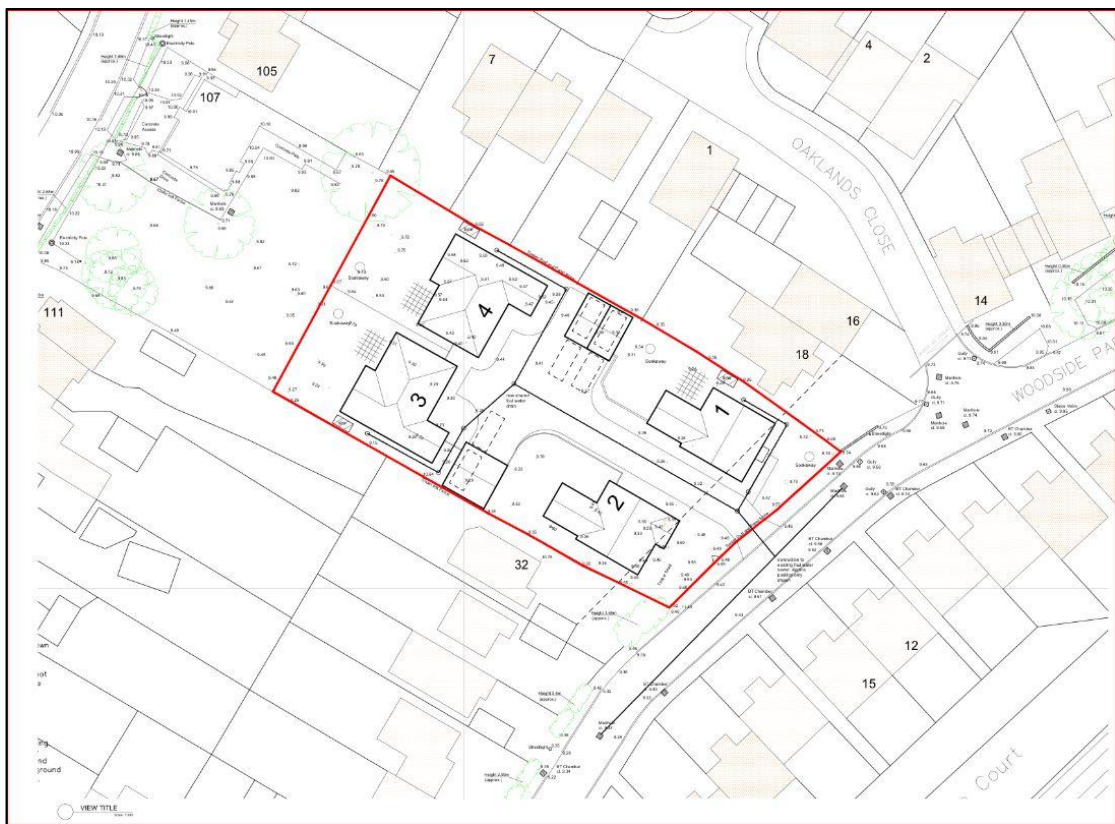
⁵⁹ Alternative Networks (Alt Nets) is a term used to refer to alternative broadband infrastructure providers other than Openreach and Virgin Media.

APPENDIX A – EXAMPLE DOCUMENTS FOR SITE SUBMISSION

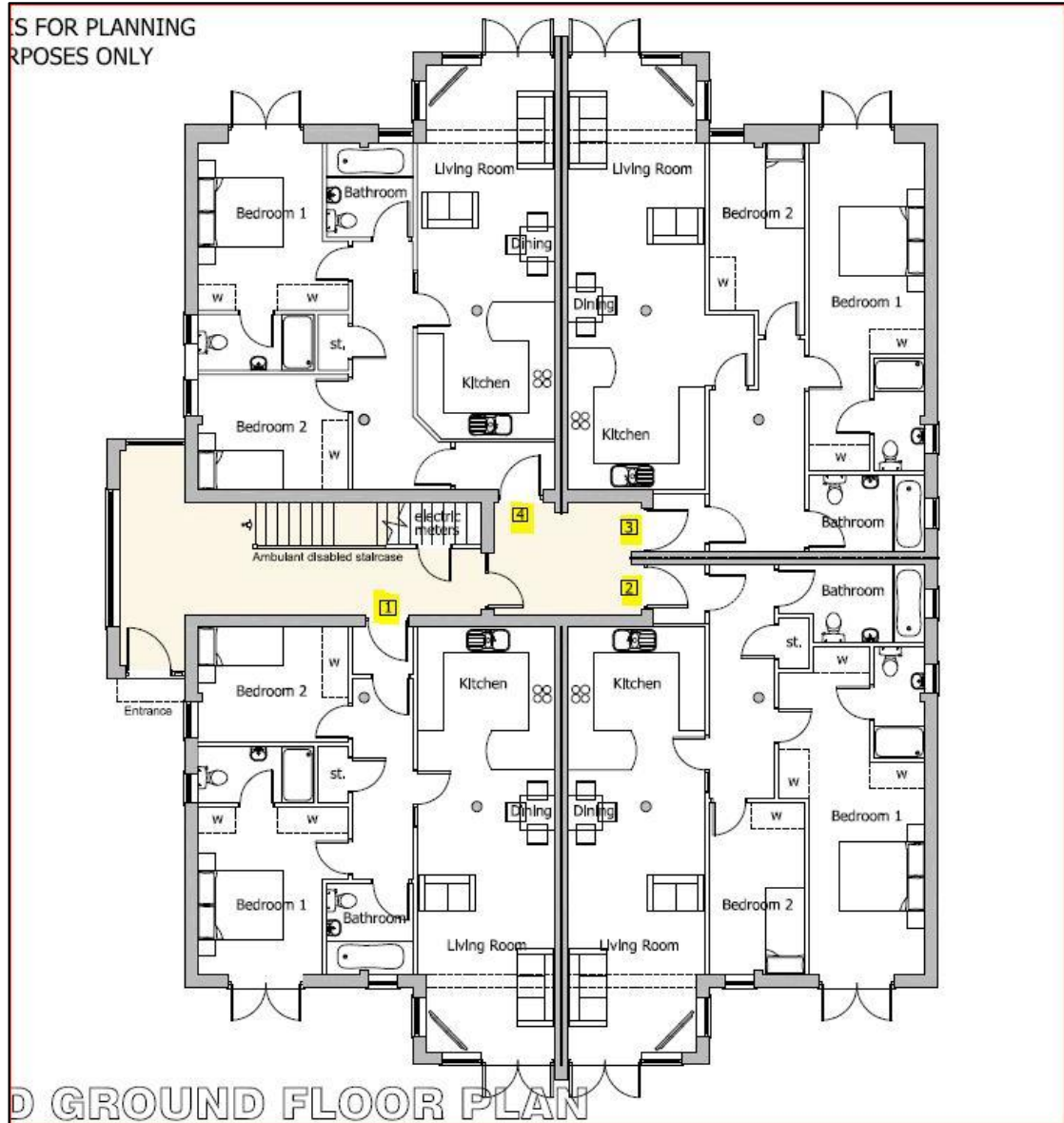
Purpose

Openreach has provided examples of good documentation to facilitate the site registration process. These are shown below for reference.

Example Site Plan



Example Site Plan with Plot Numbers



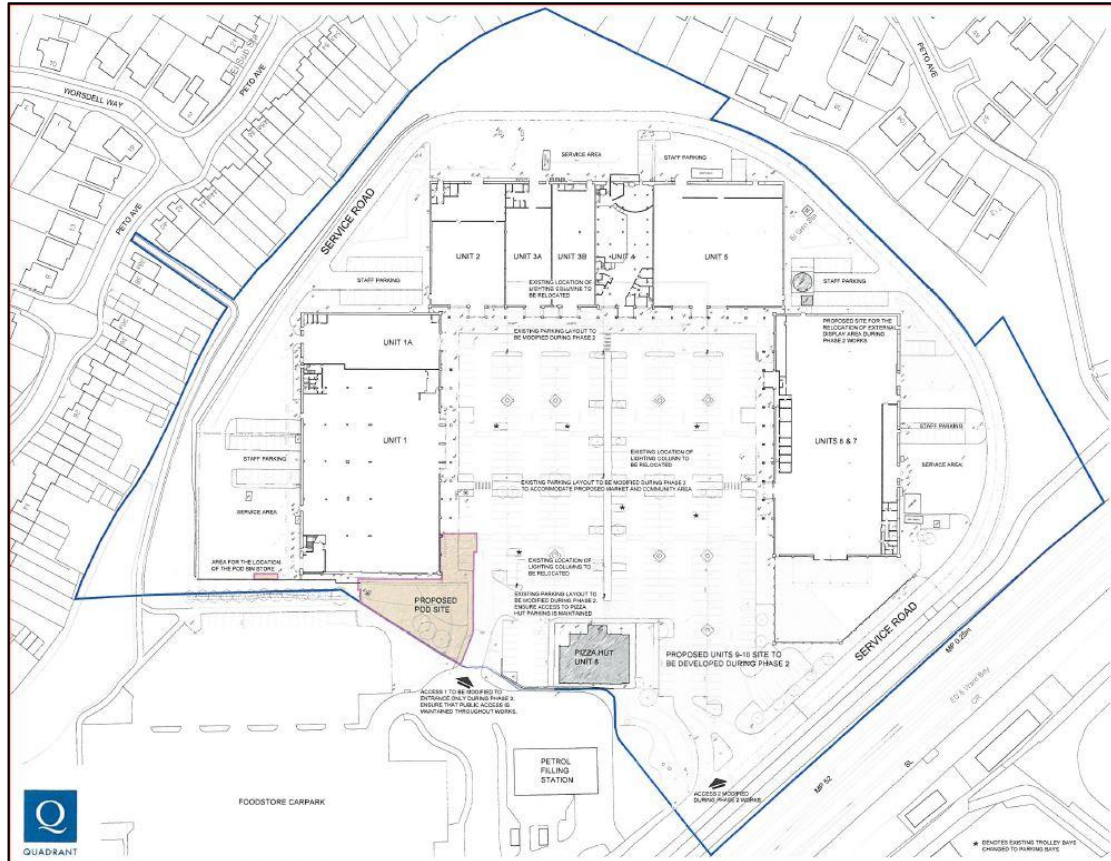
Example Flat Floor Plan with Plot Numbers



Example Site Plan for Business Unit



Example Site Plan for Business Unit Plots



APPENDIX B – DATA DUCTING INFRASTRUCTURE FOR NEW HOMES

Overview

The guidance note titled '*Data Ducting Infrastructure for New Homes (March 2008)*⁶⁰' produced by the Ministry of Housing, Communities & Local Government also provides advice on internal and external ducting. An overview of the guidance for internal and external ducting is shown in the sections below.

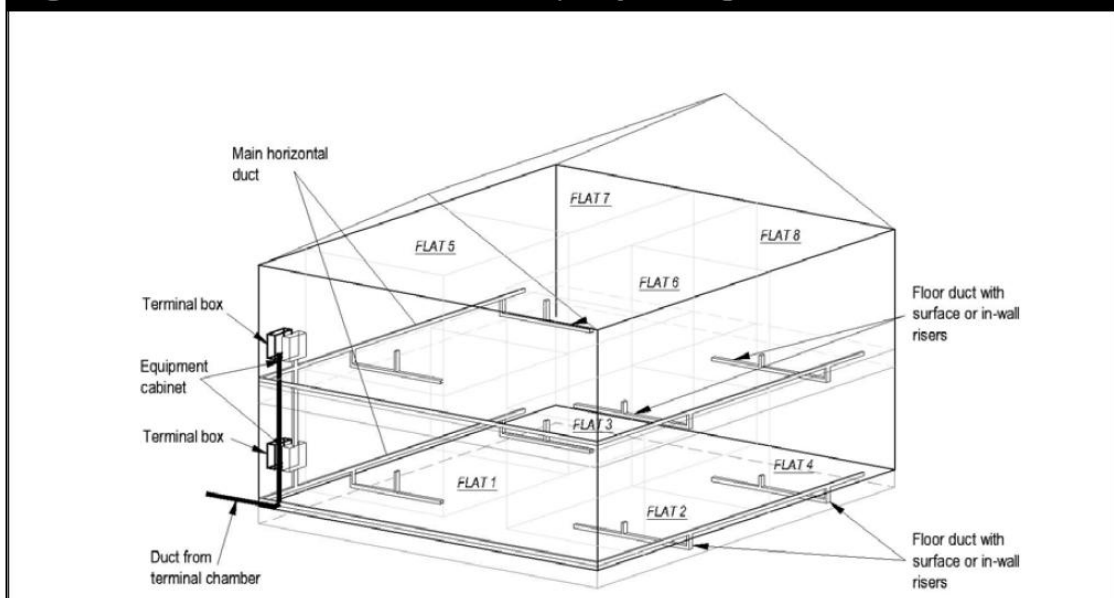
Internal Infrastructure Requirements Overview

Section 2.3.2 of the guidance details the following requirements that likely need to be considered for internal infrastructure:

- *Data sockets at 'useful locations' throughout the dwelling.*
- *A 'readily accessible' location where network equipment can be installed with a simple 'user-friendly' method of connecting the network equipment to 'live' data sockets.*
- *Mains electricity sockets that are located near the data sockets.*

The figure below presents an overview of duct distribution in a multi-occupancy building. Further details, including on ducts, are detailed within the guidance note.

Figure 2.10: Duct distribution in multi-occupancy building



Duct distribution in multi-occupancy building

⁶⁰https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/11496/dataducting.pdf

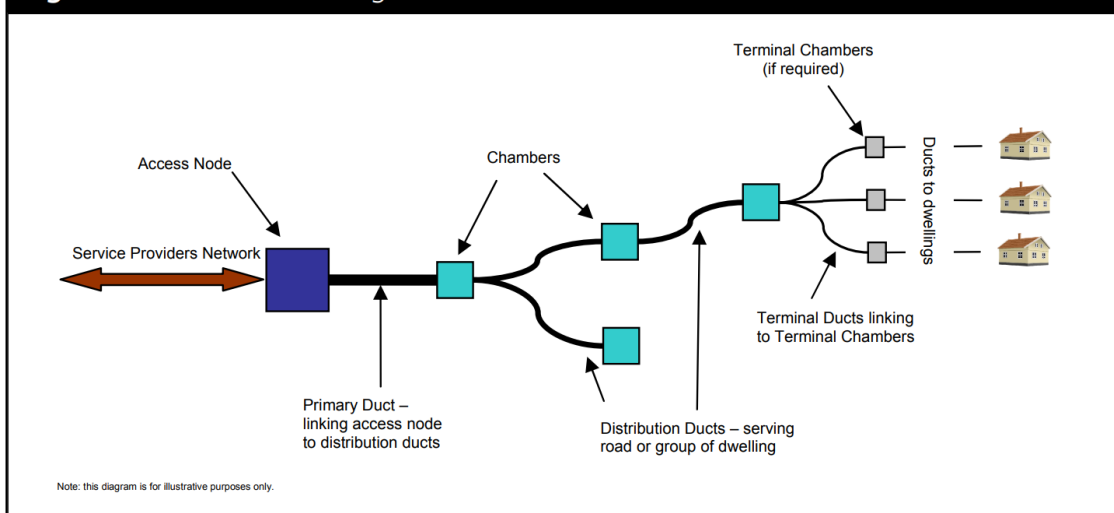
External Infrastructure Requirements Overview

Section 2.2.2 of the guidance details the following requirements that need to be considered in the design and implementation of external infrastructure:

- *Access node* – to provide an interface between the external infrastructure and the data service provider's network. Depending on the network technology and the data service provider's requirement the access node may be implemented in a street cabinet or a chamber. The access node may be required to accommodate active (powered) network equipment.
- *Street cabinets* (not shown in the figure) – may be required for cable joints, cable distribution points and possibly to house active (powered) network equipment. Cabinets should be of sufficient size for additional ducting, at least one additional duct, for future requirements.
- *Chambers* – for cable installation, cable routing, cable jointing and some passive distribution points. Chambers may also be required to accommodate active (powered) network equipment that is designed specifically for such an environment although most data service providers are likely to favour street cabinets.
- *Terminal chambers* – chambers that may be required to connect the wider external infrastructure with dwellings or groups of dwellings. Terminal chambers should be located outside the dwelling plot as stated in paragraph 2.2.7 and illustrated in Figure 2.1.
- *Ducts* – pipes to facilitate the installation and later replacement of cables. This may also include micro or inner ducts.

The figure below presents an overview of the elements forming external infrastructure. Further details, including on ducts, are detailed within the guidance note.

Figure 2.1: Elements forming external infrastructure



Elements forming external infrastructure



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