

Broadband Connectivity Assessment

East Didsbury

Dandara Living

December 2021

PLANNING SOLUTIONS FOR:

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ADMINISTRATION PAGE

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Issue	Date	Detail of Changes
1	3 rd December 2021	Initial issue
2	19 th January 2022	Second issue – updated proposed development definition

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EXECUTIVE SUMMARY

Report Purpose

Pager Power has been commissioned to investigate the broadband connectivity at the proposed development. The proposed development consists of 6 storey residential building (Use Class C3) comprising 75 new homes together with ground floor flexible community space, car parking, cycle parking as well as landscaping, highways and other associated works. The address of the proposed development is Tesco Car Park, Parrs Wood Lane, East Didsbury, Manchester M20 5NP. There is a requirement to ensure that new residences have access to superfast broadband speed (understood to mean a minimum of 24 Mbps) to ensure future occupants can obtain sufficient broadband services.

Process

The availability of broadband services and the associated speeds has been determined based on:

- Openreach coverage checker – which is available via the Openreach website and identifies available speeds in any area within the UK.
- Crosschecks with three of the main UK broadband providers.
- Investigation of the process for obtaining superfast broadband to the premises.

Conclusions and Recommendations

Suitable superfast broadband, understood to mean a minimum of 24 Mbps, is available at the proposed development location. BT and Sky, who both utilise the Openreach network, provide download speeds of between 47Mb and 71mb. This confirms that FTTC (Fibre To The Cabinet) is available however FTTP (Fibre To The Premises) is not available from Openreach. Virgin Media provide superfast services with download speeds of up to 500Mbps, available at some addresses near to the proposed development location¹. The proposed development consists of more than 19 plots. Therefore, provision of FTTP infrastructure is available free of charge for this development subject to application to Openreach. This would ensure internet speeds are maximised and is recommended for the proposed development. If the installation of FTTP were to be pursued, the application must be submitted at least six months before provision of the service to the first property is provided. The site registration process is discussed in Section 2.4. The details that must be included within the registration are:

- Site start date and required service date.
- Site address and coordinates.
- Description of development including type, phases and capacity.
- Contact details.
- Location plan, site plan (1:500) and schematic or schedule of accommodation.

¹ Proposed development location service level could not be confirmed on the virgin media availability checker.

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ABOUT PAGER POWER

Pager Power is a dedicated consultancy company based in Suffolk, UK. The company has undertaken projects in 51 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 DEVELOPMENT PLANS

1.1 Introduction

Pager Power has been commissioned to investigate the broadband connectivity at the proposed development. The proposed development consists 6 storey residential building (Use Class C3) comprising 75 new homes together with ground floor flexible community space, car parking, cycle parking as well as landscaping, highways and other associated works.. The address of the proposed development is Tesco Car Park, Parrs Wood Lane, East Didsbury, Manchester M20 5NP. There is a requirement to ensure that new residences have access to superfast broadband speed (understood to mean a minimum of 24 Mbps) to ensure future occupants can obtain sufficient broadband services.

1.2 Proposed Development Details

The proposed development and its location are shown in Figure 1² below.

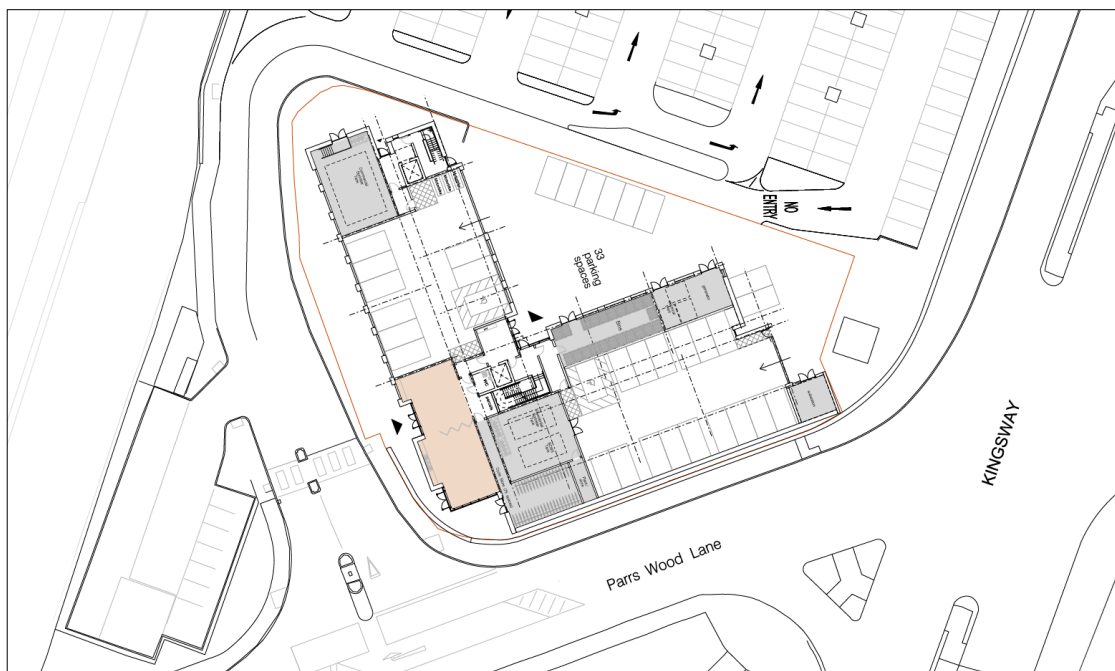


Figure 1 – Proposed development and location

² Site Location Plan_Proposed, Didsbury, Parrs Wood, Hodder+partners, Date: 09/2021, Drawing No.: L(--)-901, cropped

The extrapolated development boundary overlaid on an aerial image is shown in Figure 2 below³.



Figure 2 – Proposed development boundary – aerial image

³ Copyright © 2021 Google.

2 INTERNET SERVICES IN THE UK

2.1 Common Types of Broadband

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 below.
- 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.
 - Fibre To The Premises⁴ (FTTP) – whereby a fibre connection is made between the exchange and the residence.

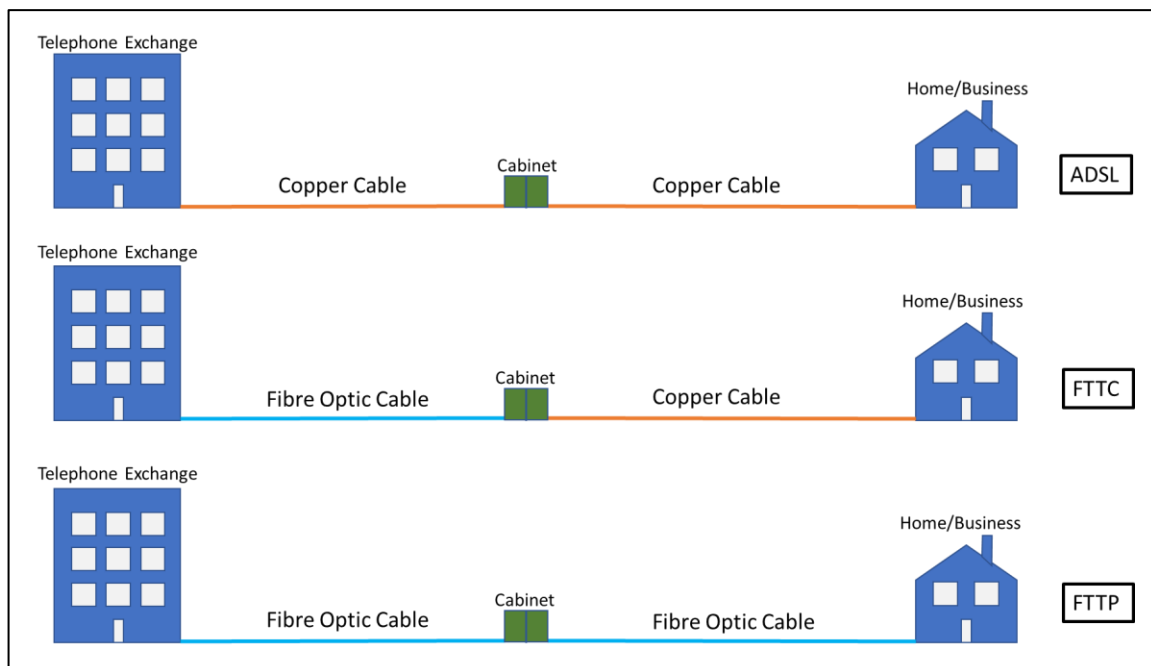


Figure 3 – Common types of broadband (fixed line)

- Gfast – which is a new hybrid technology used by Openreach that delivers broadband much like FTTC; however, the transmission is modified typically at the distribution point to increase the speed of the service.

⁴ Also referred to as Fibre To The Home (FTTH).

- Cable (DOCSIS) – typically provided by Virgin Media⁵ who make use of DOCSIS technology⁶ standard whereby typically there is a fibre connection made up to a distribution point, which in turn is connected to a residence via coaxial cable.

Wireless Broadband services available in the UK 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).
- Mobile network providers can also provide wireless home broadband via 4G / 5G technology and may be sought as another alternative solution.
- Satellite internet services are very uncommon and used only in very remote rural areas typically where no alternative viable solutions are available.

2.2 Broadband Speeds

The term 'superfast' is understood to mean speeds of 24 Mbps or higher⁷. Available speeds for the technologies are as follows:

- Standard broadband – up to 24Mbps (ADSL);
- Superfast broadband – up to 80Mbps (FTTC);
- Gfast Broadband – up to 330 Mbps;
- Cable Broadband – up to 1130 Mbps (Virgin Media);
- Ultrafast Full Fibre – typically up to 1 Gbps⁸ (FTTP).

⁵ Virgin Media now also provide FTTP solutions in the UK for home broadband services.

⁶ Data Over Cable Service Interface Specification - An international standard for data transfer over cable.

⁷ Source: [BBC, 2014, One million UK properties on 'superfast broadband' after investment](#). Last accessed August 2021.

⁸ Source: Openreach. 1 Gbps = 1,000 Mbps.

2.3 Current Availability

The availability of internet services at the proposed development has been explored in two ways:

- Assessment via Openreach – which shows the availability of their fibre network at UK locations via an automated service on their website.
- Enquiries with three main high-speed broadband providers in the UK: BT, Sky and Virgin.

The results are shown in Table 1 below.

Company	Findings	Remarks
Openreach	Superfast Fibre available at the specific address.	Superfast Fibre speed (up to 80Mbps) in the form of Fibre To The Cabinet (FTTC) is available at the following address TESCO STORES LTD, Parrs Wood Lane, M20 5NP. The Openreach network is utilised by many providers. The potential suppliers at this address are: BT, Cuckoo, Direct Save Telecom, John Lewis Broadband, NOW Broadband, Onestream, Plusnet, POP Telecom, Shell Energy Broadband, Sky, SSE, TalkTalk, Vodafone and Zen.
BT	Superfast Fibre available at the specific address.	Results showed that typical speeds in practice average from 47 Mbps to 70Mbps for Parrs Wood Lane, East Didsbury, Manchester M20 5NP. FTTC available.
Sky	Superfast Fibre available at the specific address.	Results showed that typical speeds in practice average from 51 Mbps to 71Mbps for Parrs Wood Lane, East Didsbury, Manchester M20 5NP. FTTC available.
Virgin	Inconclusive at the proposed development address.	Virgin Media broadband service is available at some addresses near to the proposed development location ⁹ up to 500Mbps. FTTC available.

Table 1 – Current availability of high-speed broadband

⁹ Flat, 837, Wilmslow Road, M20 5WD; 884 Wilmslow Road, Manchester, M20 5PG.

2.4 Facilitation of Fibre Internet Services to Premises

The research concluded that currently no FTTP is present at the proposed development address. The proposed development will benefit from the option of FTTP. 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 considered to be more reliable and consistent¹⁰. 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*¹¹. The proposed development therefore qualifies for free facilitation of the fibre network from the exchange to the properties themselves. This requires registration of the site, specifically:

- Registration is required 6 months before 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, whether it is part of a larger development and associated phases;
- Contact details for the company building the properties and the person managing any queries from Openreach must be provided;
- Plans of the development must be provided including:
 - Location;
 - Site plan at a minimum of 1:500;
 - Schedule of accommodation that show how many plots per floor and their connection to a riser in cases of multiple cores.
- Registration is undertaken online¹², whereupon it will be assessed by the Openreach team. The timescale for this assessment is not defined, the customer service team advised that this varies according to the number of applications being processed at any 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.

¹⁰ Internet latency is typically lower for FTTP and internet speeds are usually more consistent.

¹¹ 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>.

¹² <https://www.developers.openreach.co.uk/developerportal/index>

3 CONCLUSIONS

3.1 Conclusions

Suitable superfast broadband, understood to mean a minimum of 24 Mbps, is available at the proposed development location. BT and Sky, who both utilise the Openreach network, provide download speeds of between 47Mb and 71mb. This confirms that FTTC is available however FTTP is not available from Openreach. Virgin Media provide superfast services with download speeds of up to 500Mbps, available at some addresses near to the proposed development location¹³

The proposed development consists of more than 19 plots. Therefore, Fibre To The Premises (FTTP) infrastructure is available free of charge for this development subject to application to Openreach. This would ensure internet speeds are maintained and is recommended for the proposed development. If the installation of FTTP were to be pursued, the application must be done at least six months before provision of the service to the first property is provided. The site registration process is discussed in Section 2.4. The details that must be included within the registration are:

- Site start date and required service date.
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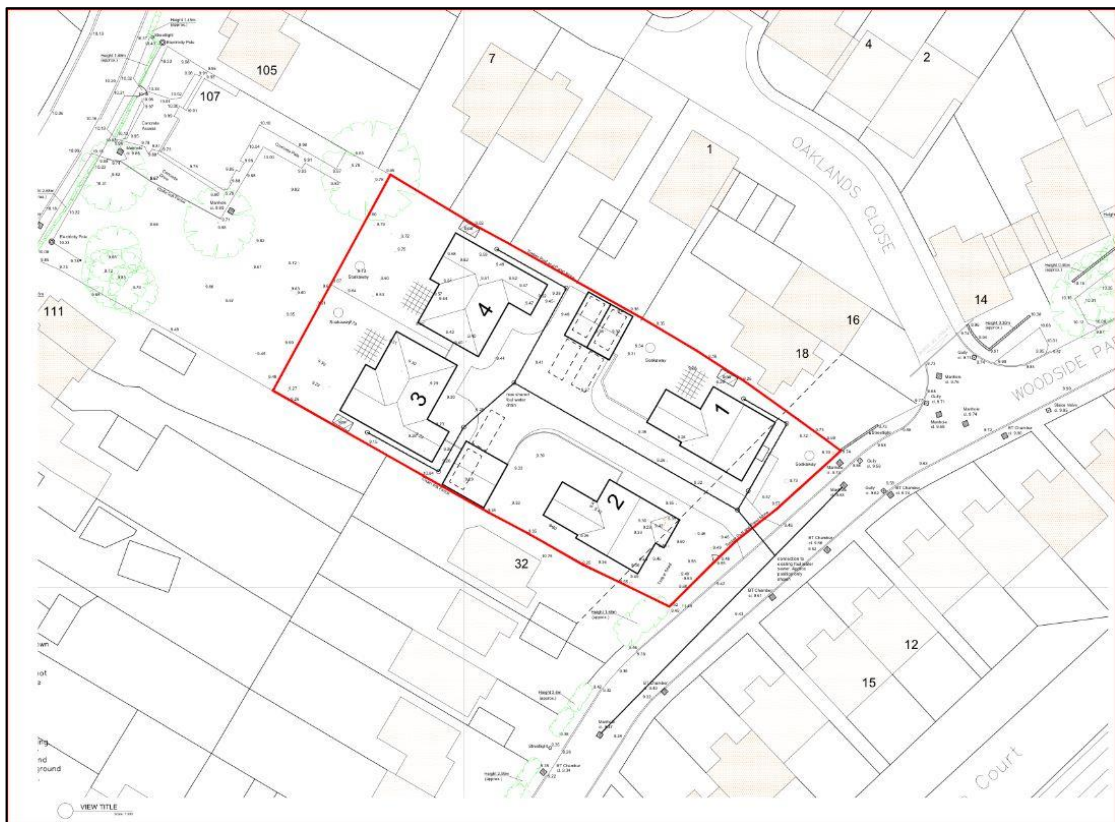
¹³ Proposed development location service level could not be confirmed on the virgin media availability checker.

APPENDIX A – EXAMPLE DOCUMENTS FOR SITE SUBMISSION

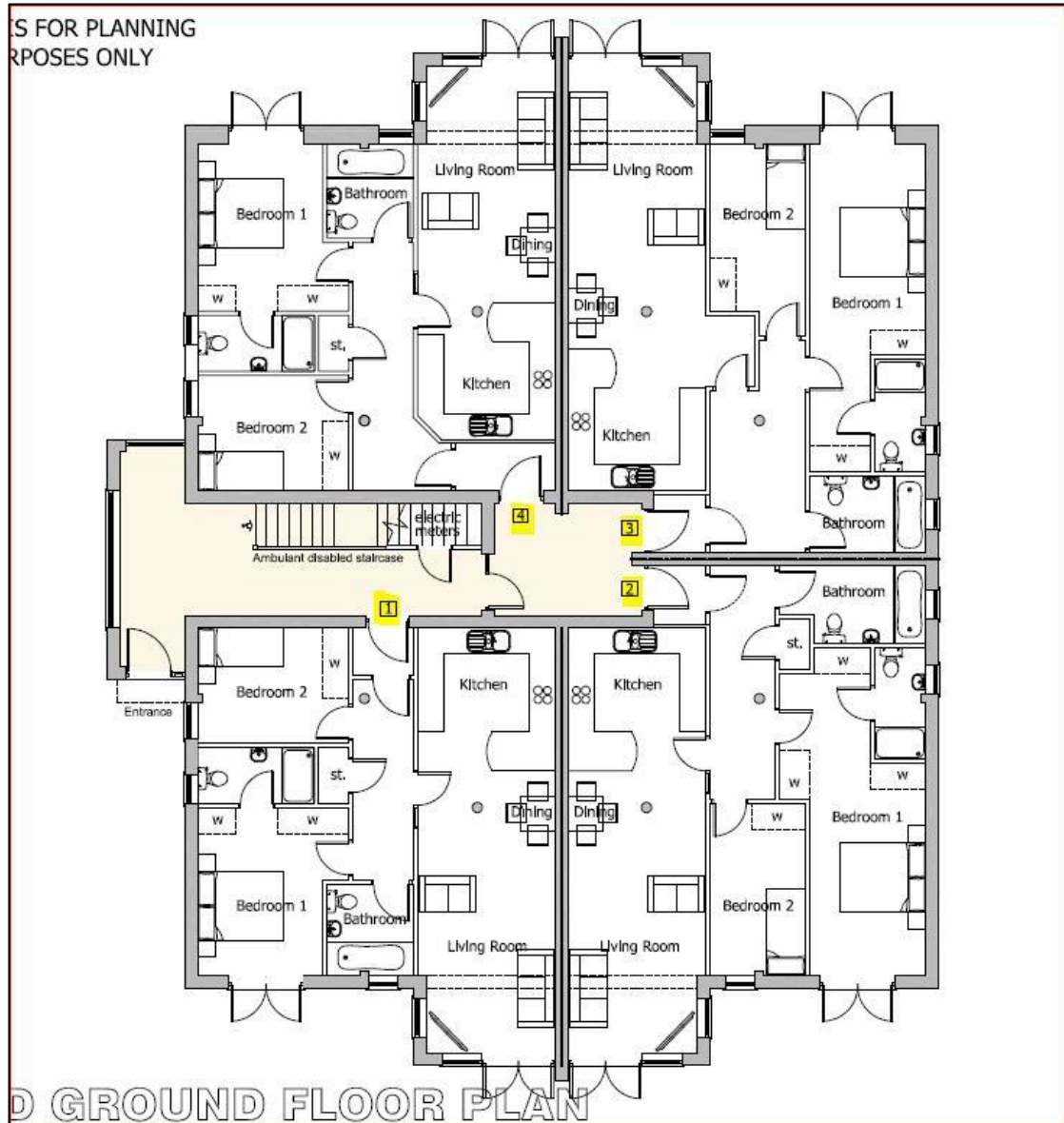
Purpose

Openreach have 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



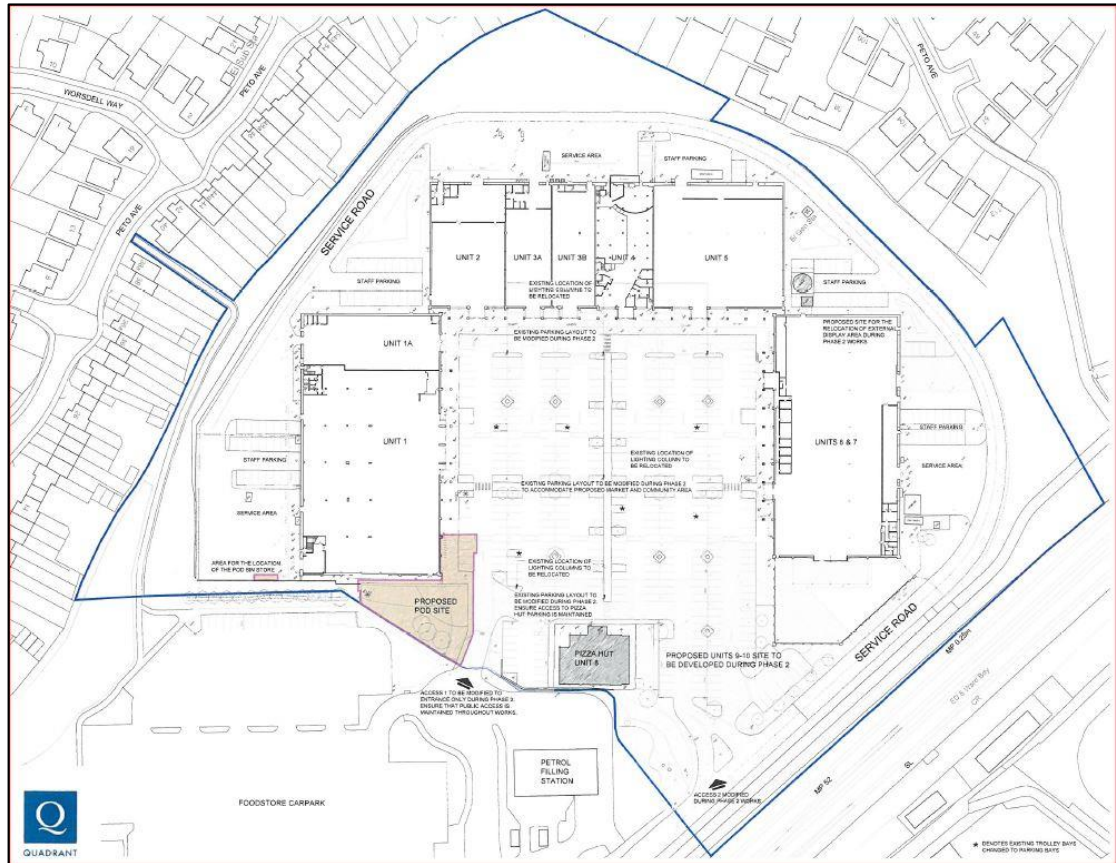
Example Flat Floor Plan with Plot Numbers



Example Site Plan for Business Unit



Example Site Plan for Business Unit Plots





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