

Broadband Connectivity Assessment

Deloitte LLP

Oldham Road

November, 2019

PLANNING SOLUTIONS FOR:

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ADMINISTRATION PAGE

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1	December, 2018	Initial issue
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EXECUTIVE SUMMARY

Report Purpose

Deloitte LLP is proposing a residential building development located at New Cross in Manchester, UK. This report considers the Oldham Road development, located between Bendix Street and Thompson Street. 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 the associated 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 where this is not currently available.

Results

- Fibre broadband from Openreach is available in the vicinity of the development. Fibre To The Cabinet (FTTC) from the Manchester Barbican Exchange is available at the nearest addresses that can be checked. FTTC facilitates speeds of up to 80 Mbps.
- The proposed development comprises 144 residential units. Any development that comprises more than 30 homes is eligible for free provision of Fibre To The Premises (FTTP) from Openreach. This means that high-speed broadband (up to 1 Gbps) will be available within the proposed development.
- FTTP services potentially allow speeds of up to 1Gbps. Provision of this service will therefore facilitate the highest available speeds for occupants of the proposed development.
- Available internet speeds¹ from BT, Sky and Virgin are:
 - BT indicates speeds of up to 73 Mbps for the nearest house number that can be verified.
 - Sky indicates that Sky Fibre Max is available in the proposed development area. Speeds of 5.2 – 74 Mbps are indicated on their website for the nearest house number that can be verified.
 - Virgin broadband services do not appear to be available in the area.

¹ The development postcode and, where applicable, nearest house number was submitted to each provider via their respective websites.

Recommendation

It is recommended that the site is registered with Openreach in order to facilitate provision of FTTP at the proposed development. This 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.
- 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.

LIST OF CONTENTS

Administration Page	2
Executive Summary	3
Report Purpose	3
Process	3
Results	3
Recommendation	4
List of Contents	5
List of Figures	6
List of Tables	6
About Pager Power	7
1 Background	8
1.1 Introduction	8
1.2 Development Details	9
2 Internet Services in the UK.....	10
2.1 Types of Broadband.....	10
2.2 Speed Requirements.....	10
2.3 Current Availability	11
2.4 Facilitation of Fibre Internet Services	12
Appendix A – Example Documents for Site Submission.....	13
Purpose	13
Example Site Plan	13
Example Site Plan with Plot Numbers.....	14
Example Flat Floor Plan with Plot Numbers	15
Example Site Plan for Business Unit.....	16
Example Site Plan for Business Unit Plots	17

LIST OF FIGURES

Figure 1 Proposed development location	9
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LIST OF TABLES

Table 1 Current availability of high-speed broadband	11
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ABOUT PAGER POWER

Pager Power is a dedicated consultancy company based in Suffolk, UK. The company has undertaken projects in 46 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

Deloitte LLP is proposing a residential building development located at New Cross in Manchester, UK. This report considers the Oldham Road development, located between Bendix Street and Thompson Street. There is a requirement to consider the availability of superfast broadband at new residences to ensure future tenants can obtain the associated services. Specifically, Manchester City Council has advised the developer that:

"The statement should outline how the developer has considered facilitating superfast broadband in their development, including discussions they have had with broadband and network providers before submitting a planning application. The statement should include:

Details of engagement with broadband and network providers, including names of providers contacted, dates of contact, and summary of feedback received.

- *The findings of the free connectivity assessment from Openreach, including details of any cost contributions that would be required from the developer in cases where Openreach cannot offer a free service.*
- *The current connectivity options for the site and achievable internet speeds.*
- *The potential connectivity options for the development and potential achievable internet speeds.*
- *The proposed method of ensuring superfast broadband for the site, including measures to ensure that the development is 'high speed ready' in cases where it is unfeasible or disproportionately costly to provide superfast connectivity at the time of the development*

Details of the Openreach service for new developments can be found on their website. Information on the Government's agreement with Openreach and the Home Builders Federation can be found on the Government website."

This report has been commissioned in order to satisfy the requirement set out by Manchester City Council.

1.2 Development Details

The proposed development boundary is highlighted in Figure 1² below.

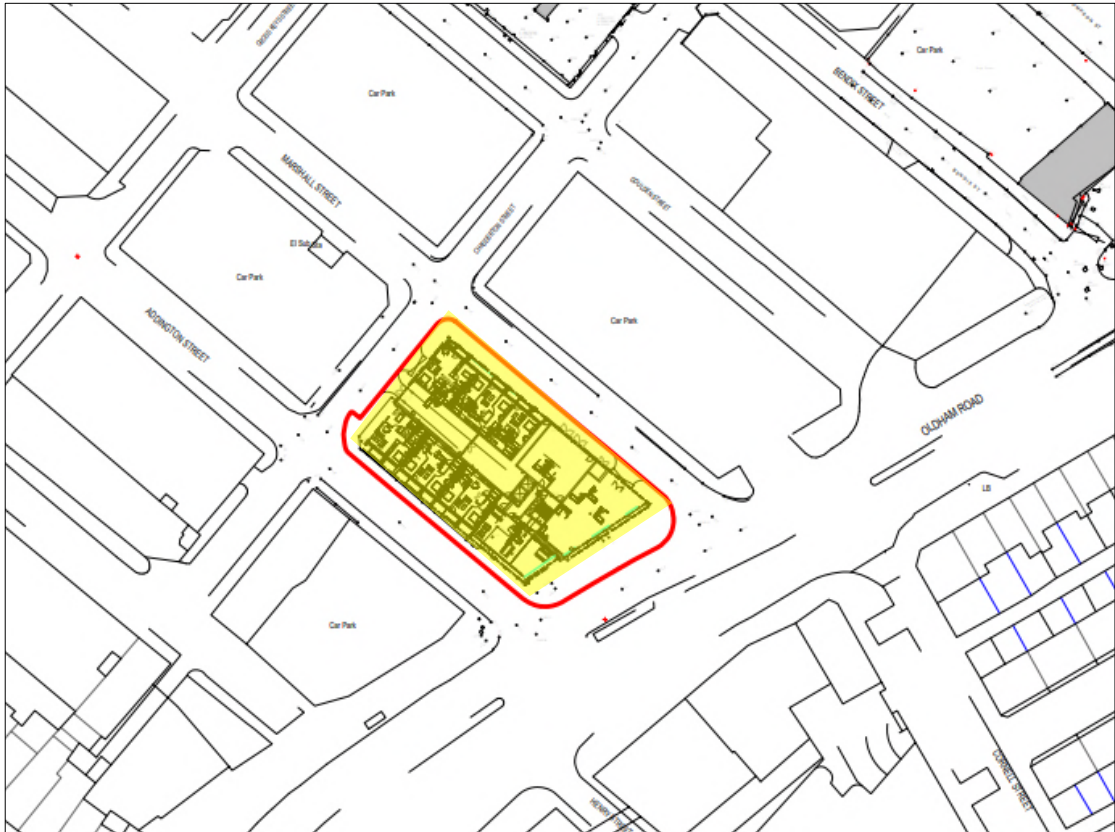


Figure 1 Proposed development location

The proposed Oldham Road development is for 144 residences – the postcode is taken to be M45FQ.

² Provided to Pager Power by Deloitte LLP (cropped).

2 INTERNET SERVICES IN THE UK

2.1 Types of Broadband

Broadband services in the UK can be provided in various ways. Options include:

- Asymmetric Digital Subscriber Line (ADSL) – which is provided via a copper telephone line.
- 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, which in turn is connected to a residence via a copper cable.
 - Fibre To The Premises (FTTP) – whereby a fibre connection is made between the exchange and the residence.
- Gfast – which is a new technology that delivers broadband via a copper cable, much like ADSL, however the transmission is modified to increase the speed of the service.

2.2 Speed Requirements

Manchester City Council has specified that the facilitation of superfast broadband must be considered prior to submitting a planning application (see Section 1). The term ‘superfast’ is understood to mean speeds of 24 Mbps or higher³.

Available speeds for the three fastest technologies are:

- Gfast – up to 330 Mbps.
- FTTC – up to 80 Mbps.
- FTTP – up to 1Gbps⁴.

³ Source: BBC, 2014, *One million UK properties on ‘superfast broadband’ after investment* (<https://www.bbc.co.uk/news/technology-28688588>), last accessed December 2018

⁴ 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, namely:
 - BT.
 - Sky.
 - Virgin.

The results are shown in Table 1 below.

Company	Findings	Remarks
Openreach	The Openreach fibre network is likely to be accessible at the proposed development location.	Fibre To The Cabinet (FTTC) from the Manchester Barbican Exchange is available at the nearest address that could be assessed via this service (4 Addington Street). The Openreach network is utilised by many providers including BT and Sky. Virgin does not utilise the BT Openreach fibre network.
BT	Fibre broadband is likely to be available at the development location.	Speeds of up to 73 Mbps for the nearest house number that can be verified (4 Addington Street).
Sky	Fibre broadband is likely to be available at the development location.	Sky indicates that Sky Fibre Max is available for the nearest house number that can be verified (4 Addington Street). Speeds of 5.2 – 74 Mbps are indicated for this address.
Virgin	Virgin indicates that their broadband services are not available in the proposed development area.	The proposed development postcode is not recognised by the Virgin coverage checker – however services do not appear to be available nearby addresses.

Table 1 Current availability of high-speed broadband

2.4 Facilitation of Fibre Internet Services

Property developers can facilitate deployment of the Openreach fibre network at locations where this is not available. The process and the cost of doing this varies depending on the development type and size.

For developments comprising more than 30 plots, Openreach will FTTP for free. A 'plot' in this context is defined as *an individually Council Addressed property paying full residency council tax*⁵. 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 online⁶, 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.

⁵ Confirmed in a phone call between the report author and Openreach customer support in 2018 and is closely aligned with the definition of 'residential property' on the Openreach website as accessed in September 2019.

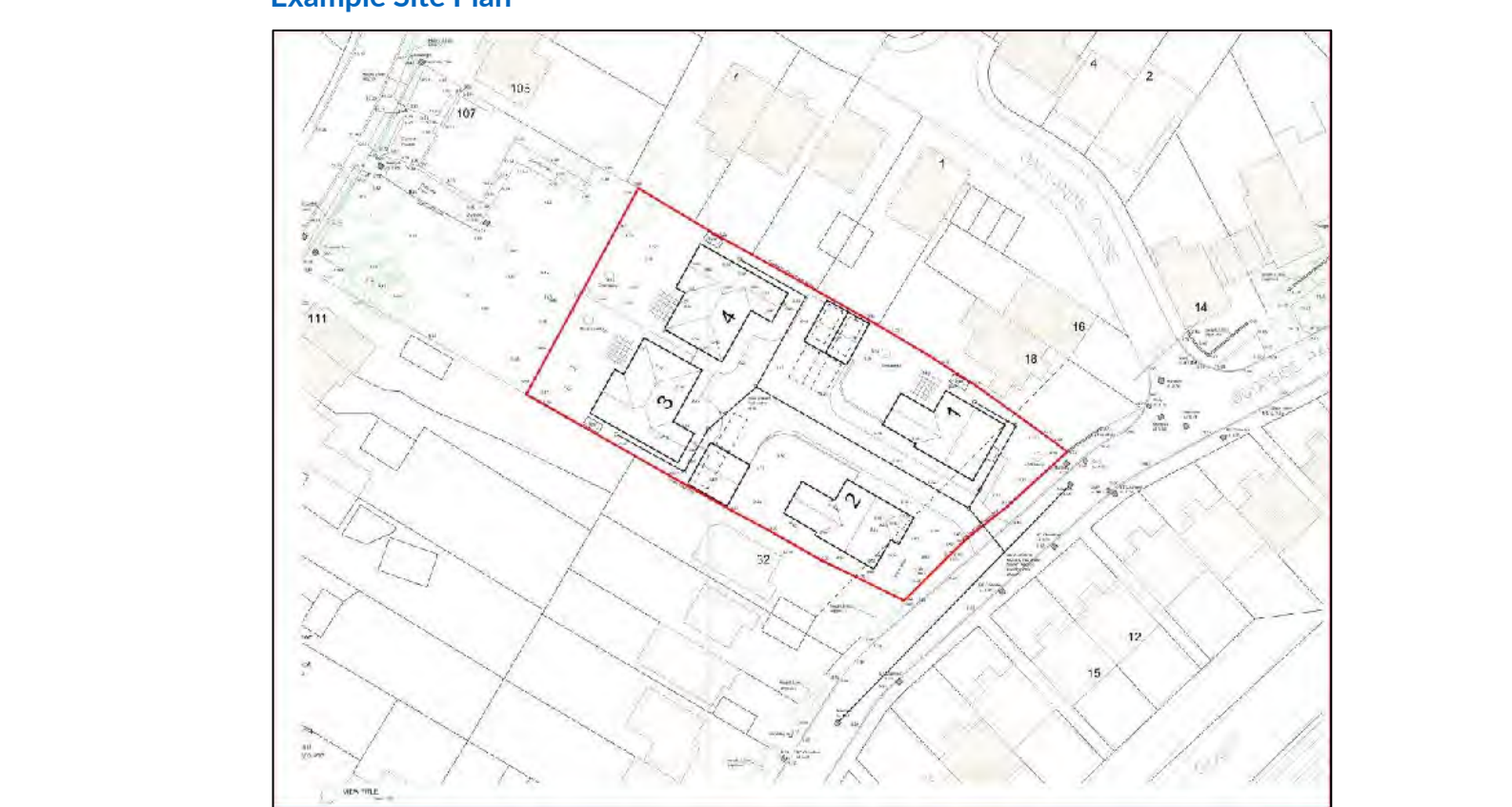
⁶ <https://www.formwize.openreach.co.uk/run/survey3.cfm?idx=505d0400000f0d>

APPENDIX A – EXAMPLE DOCUMENTS FOR SITE SUBMISSION

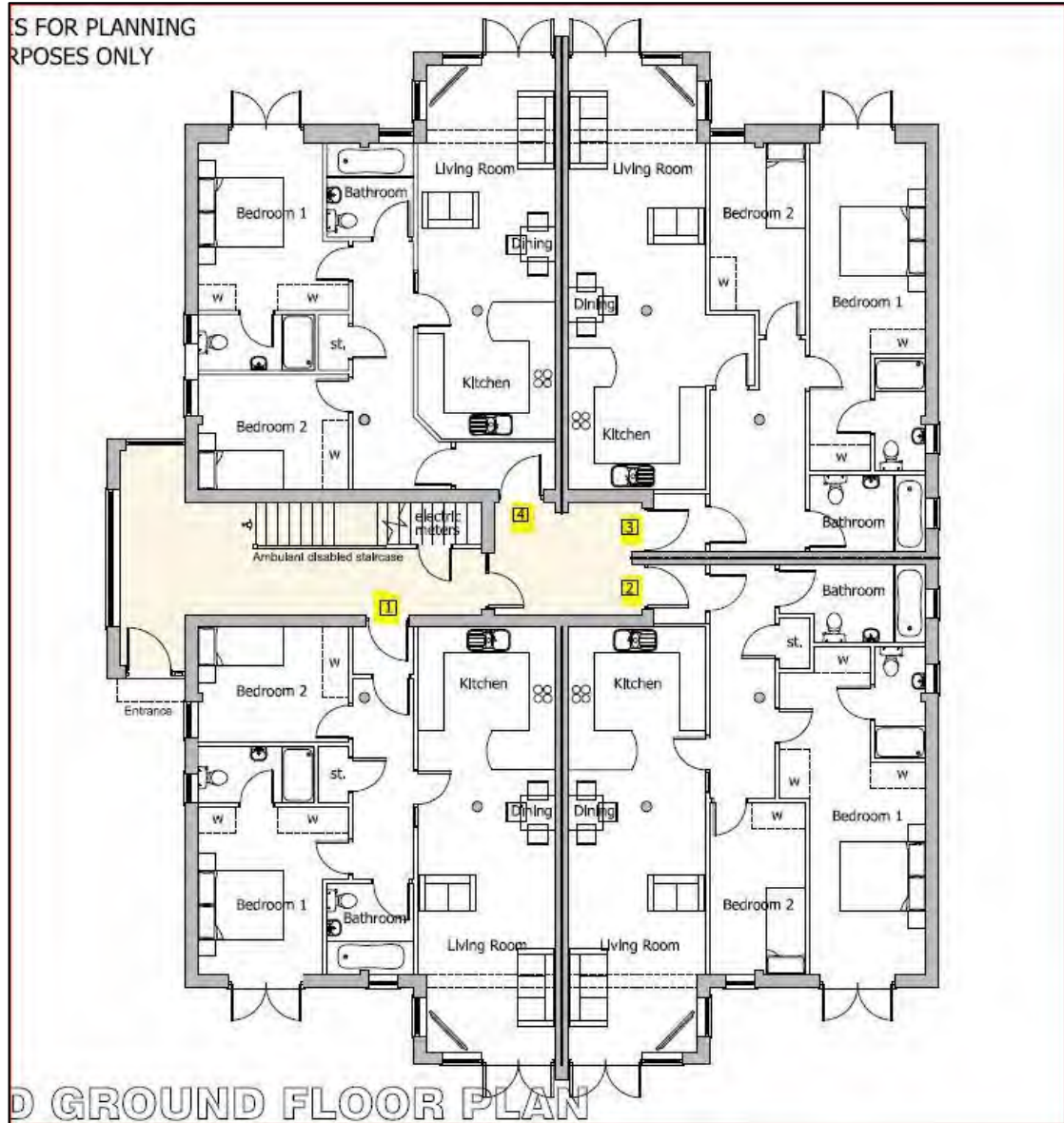
Purpose

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



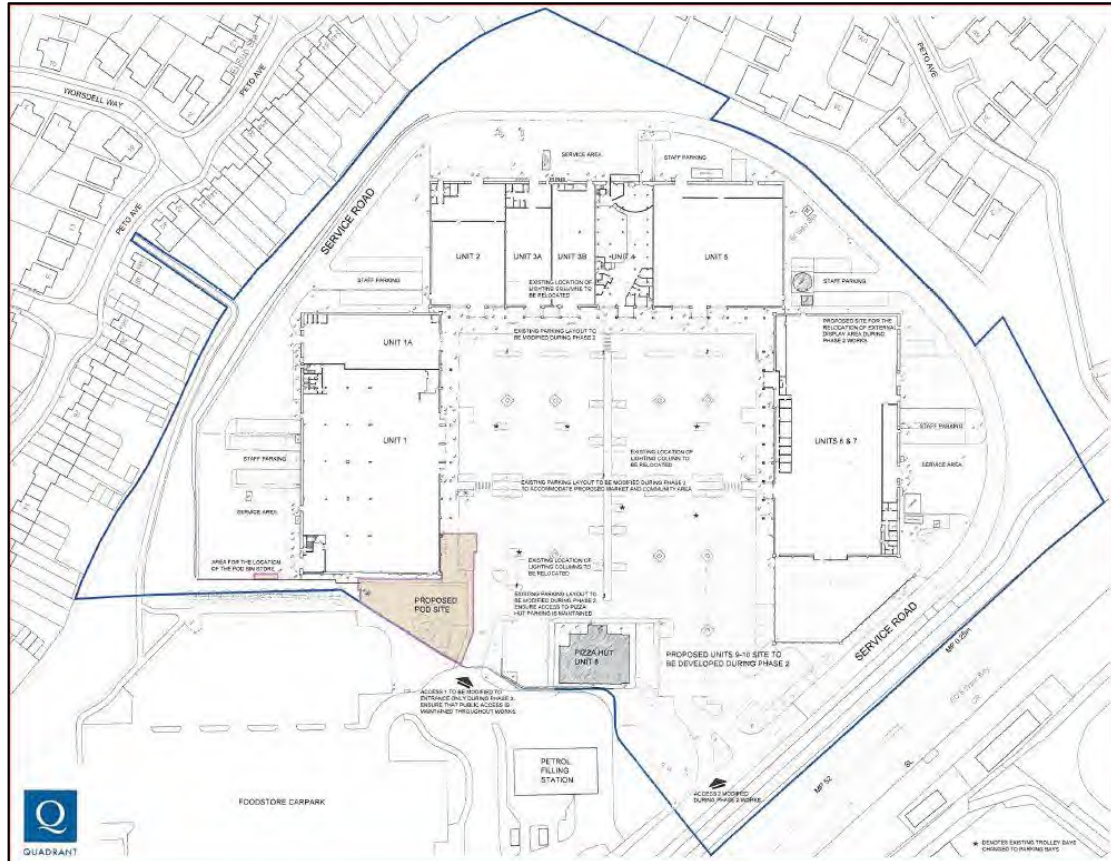
Example Flat Floor Plan with Plot Numbers



Example Site Plan for Business Unit



Example Site Plan for Business Unit Plots





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