

# BM and HP Parker Properties

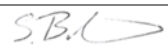
Land Adjacent to 1133  
Rochdale Road,  
Blackley

## Transport Statement



## Control Sheet

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 Blackley  
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## Acknowledgements

GoogleMyMaps and OpenRouteService have been used to generate figures included in this report for illustrative purposes only.

The Crashmap database has been utilised to carry out a road traffic incident review.  
[www.crashmap.co.uk](http://www.crashmap.co.uk)

Extracts of 'Providing for journeys on foot' and TfGM Cycle Map have been included in this report.

The TRICS database v7.10.4 has been used in this report to calculate traffic generations.

## Contents

|                                            |    |
|--------------------------------------------|----|
| 1. Introduction.....                       | 5  |
| 2. Planning Policy Context.....            | 6  |
| 3. Existing Situation .....                | 8  |
| 4. Accessibility by Sustainable Modes..... | 11 |
| 5. Proposed Development.....               | 18 |
| 6. Trip Generation Assessment .....        | 19 |
| 7. Summary and Conclusions .....           | 21 |

## List of Tables

|                                                           |    |
|-----------------------------------------------------------|----|
| Table 1 – Summary of Bus Services .....                   | 17 |
| Table 2 –Proposed Flats Search Parameters.....            | 19 |
| Table 3 – Multimodal Trips for 7 Proposed Apartments..... | 19 |
| Table 4 – Vehicle Trips from Proposed Flats .....         | 20 |

## List of Figures

|                                                                                        |    |
|----------------------------------------------------------------------------------------|----|
| Figure 1 – Location of Site [GoogleMyMaps] .....                                       | 5  |
| Figure 2 – Site Boundary .....                                                         | 8  |
| Figure 3 – 5-year Accident History Plot [Crashmap] .....                               | 9  |
| Figure 4 – Indicative Walking Isochrone [OpenRouteService] .....                       | 12 |
| Figure 5 – Indicative Cycling Isochrone [OpenRouteService] .....                       | 14 |
| Figure 6 – Extract of Interactive Cycling Map [Transport for Greater Manchester] ..... | 15 |
| Figure 7 – Recommended Maximum Walking Distances to Bus Stops.....                     | 16 |
| Figure 8 – Location of Bus Stops [GoogleMyMaps].....                                   | 16 |

## List of Appendices

|                         |
|-------------------------|
| Appendix A              |
| Crashmap Summary Report |
| Appendix B              |
| Proposed Site Plan      |
| Appendix C              |
| TRICS outputs           |

## 1. Introduction

- 1.1 Sanderson Associates Consulting Engineers has been appointed by BM and HP Parker Properties to provide highway consultancy services in connection with land adjacent to 1133 Rochdale Road, Blackley. The development is for the construction of 5 apartments, on the brownfield site. The location of the site is shown in **Figure 1**.

**Figure 1 – Location of Site**

[GoogleMyMaps]



- 1.2 This Transport Statement has been prepared to support the current application, and in accordance with Planning Practice Guidance 'Transport evidence bases in plan making and decision taking' considers the following key aspects:
- The local highway network;
  - The existing use of the site, planning history, highway network and accidents;
  - The proposed development and its operational characteristics;
  - Access arrangements including parking and servicing;
  - Accessibility of the site by sustainable modes;
  - Impact of the proposed development traffic; and,
  - A summary and conclusion.

## 2. Planning Policy Context

### 2.1 National Planning Policy

2.1.1 The National Planning Policy Framework (NPPF), first published on 27 March 2012 and last updated on 20<sup>th</sup> December 2023, provides the most up-to-date national guidance on transport and its role within the planning system.

2.1.2 In considering development proposals, NPPF paragraph 114 states that;

*“In assessing sites that may be allocated for development in plans, or specific applications for development, it should be ensured that:*

*a) appropriate opportunities to promote sustainable transport modes can be – or have been taken up, given the type of development and its location;*

*b) safe and suitable access to the site can be achieved for all users;*

*c) the design of streets, parking areas, other transport elements and the content of associated standards reflects current national guidance, including the National Design Guide and the National Model Design Code; and*

*d) any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree.”*

2.1.3 NPPF paragraph 115 and 116 state:

*“Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe.”*

*‘Within this context, applications for development should:*

*a) give priority first to pedestrian and cycle movements, both within the scheme and with neighbouring areas; and second – so far as possible – to facilitating access to high quality public transport, with layouts that maximise the catchment area for bus or other public transport services, and appropriate facilities that encourage public transport use;*

*b) address the needs of people with disabilities and reduced mobility in relation to all modes of transport;*

*c) create places that are safe, secure and attractive – which minimise the scope for conflicts between pedestrians, cyclists and vehicles, avoid unnecessary street clutter, and respond to local character and design standards;*

*d) allow for the efficient delivery of goods, and access by service and emergency vehicles; and*

*e) be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations.’*

## 2.2 Local Planning Policies

### ***Manchester Local Development Plan Framework: Core Strategy (July 2012)***

- 2.2.1 The adopted Core Strategy was adopted on 11 July, 2012 and is the key document in Manchester's Development Framework, covering a period of 15 years from 2012 to 2027. It outlines the Council's vision for Manchester in 2027, along with planning policies used to deliver the vision.
- 2.2.2 Objective 5: Transport puts forward the policies designated to improve the physical connectivity of the City, through sustainable transport networks, to enhance its functioning and competitiveness and provide access to jobs, education, services, retail, leisure and recreation. Policy T1: Sustainable Transport is a key policy in relation to this development. It outlines that the Council will support developments which:
- Improve choice by developing alternatives to the car;
  - Facilitate modes of transport that reduce carbon emissions e.g. by incorporating charging points for EV;
  - Reduce the negative impacts of road traffic, e.g. congestion, air pollution and road accident casualties;
  - Take account of the needs of road users according to a broad hierarchy consisting of, in order of priority
    1. Pedestrians and disabled people;
    2. Cyclists, public transport;
    3. Commercial access;
    4. General off peak traffic; and,
    5. General peak time traffic.

### ***Greater Manchester Transport Strategy 2040 (February 2017)***

- 2.2.3 The Greater Manchester Transport Strategy 2040, adopted in February 2017 and updated in January 2021 sets out the ambitions to create '*world class connections that support long-term, sustainable economic growth and access to opportunity for all.*'

## 2.3 The Development in Planning Policy Context

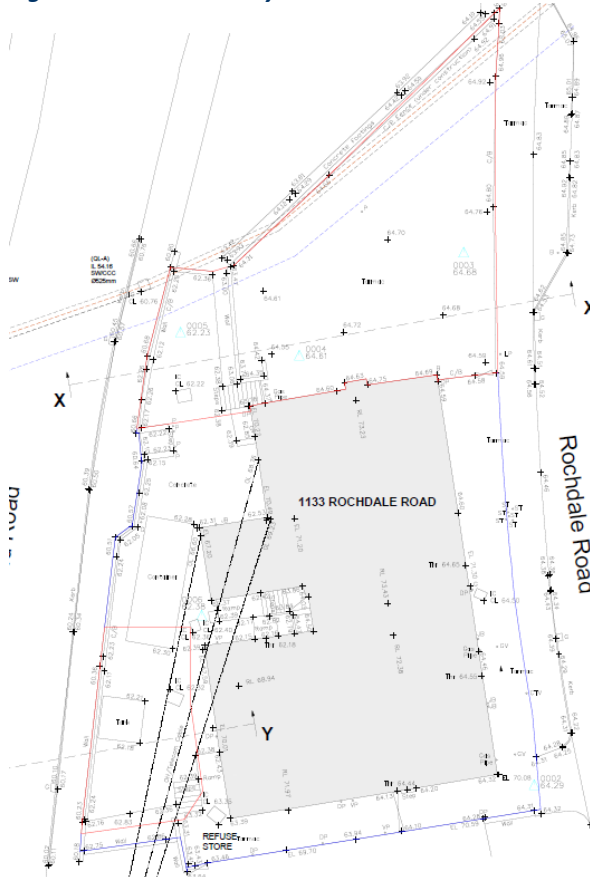
- 2.3.1 This Transport Statement demonstrates that the development is sustainable and the residual cumulative traffic impact is not severe. The development is therefore in accordance with the transport principles set out in NPPF.
- 2.3.2 It is also demonstrated that the development complies with the requirements of the Manchester Core Strategy and Greater Manchester Transport Strategy.

### 3. Existing Situation

#### 3.1 Site and Surrounding Area

3.1.1 The application site is currently a vacant parcel of land that sits between Rochdale Road (A664) and Middleton Old road, the existing site boundary is shown in **Figure 2**.

**Figure 2 – Site Boundary**



3.1.2 The site is bounded by the following:

- North: Retail Premises
- East: Rochdale Road, Unmanaged grassland and residential properties
- South: Residential Properties and Sandy Brow
- West: Middleton Old Road, Commercial Properties and St. Peter's Church

#### 3.2 Local Highway Network

3.2.1 Rochdale Road (A664) is a single carriageway, approximately 8.5m in width and is subject to a 30mph speed limit. An on-carriageway cycle lane is present on the western side (site side) of the carriageway. Approximately 150m north of the site, the cycle lane merges into a bus lane. Rochdale Road widens to form a dual carriageway, with bus lanes present on either side of the carriageway. Footways and street lighting are present on both sides of the carriageway. Rochdale Road connects to Manchester City Centre, approximately 5km to the south.

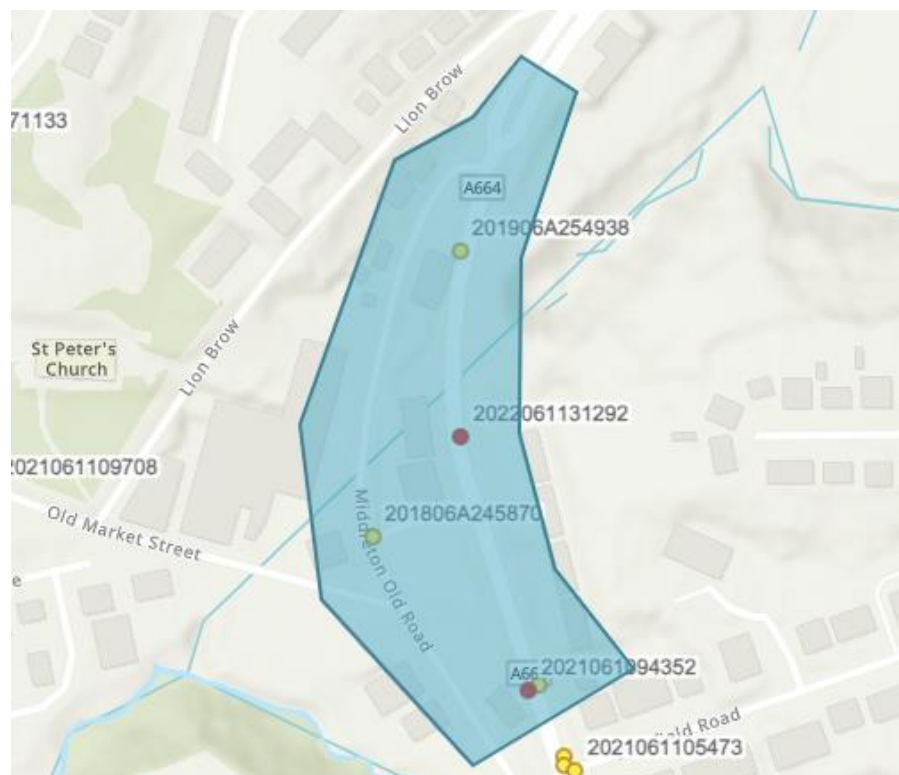
- 3.2.2 Middleton Old Road, which runs to the west of the site, is subject to a 30mph speed limit and also has footways and street lighting present. It allows connections to be made to Old Market Street, connecting the site to the further retail, employment and residential areas to the west.
- 3.2.3 On street parking is available outside the site frontage on Rochdale Road which are marked out laybys. However, the layby to the south of the site is plated as no waiting between 7am and 7pm and no loading between 7am – 10am and 4pm – 7pm.
- 3.2.4 On the eastern flank of Middleton Old Road double yellow lines are present along the site frontage which terminate immediately south of the site boundary and then there are no parking restrictions for 50m. On its western flank single yellow lines are present which are plated as no waiting Mon – Fri 8am-6.30pm, Sat 8am-12:20pm

### 3.3 Accident History

- 3.3.1 National guidance states that Transport Statements should include, “an analysis of the injury accident records on the public highway in the vicinity of the site access for the most recent 3-year period, or 5-year period if the proposed site has been identified as within a high accident area.”
- 3.3.2 Whilst the local network is not considered to be a ‘high accident area,’ Rochdale Road is a Medium Risk Road. Therefore, in order to provide a robust assessment, the most recent 5-year period has been considered. Road traffic collision data has been obtained from the Crashmap database for the most recent five year period available (January 2017 – December 2021). The incident plot diagram within the vicinity of the site is shown in **Figure 3**.

**Figure 3 – 5-year Accident History Plot**

**[Crashmap]**



3.3.3 From the incident plot diagram, five accidents (three slight and two serious in severity) have occurred in the assessment area. The full report can be viewed at **Appendix A**, and a summary of the accidents is as follows:

- Incident Reference: 201806A245870 – occurred on Thursday 5 July, 2018 at 12:05AM in dry conditions. Both vehicles were travelling normally and the front of car one collided with the nearside of car 2, causing the driver of car 2 to experience slight injuries.
- Incident Reference: 201906A254938 – occurred on Friday 15 March, 2019 at 11:28AM in dry conditions. A motorcycle and a taxi were involved whereby the taxi was parked in the carriageway and the motorcycle, proceeding normally collided into the rear of the taxi. The driver of the taxi experienced slight injuries.
- Incident Reference: 201906A259000 – occurred on Friday 28 June, 2019 at 9:30PM in dry conditions. The report does not outlined the incident itself, but a car was performing a U turn and a pedal cycle was proceeding normally. The bicycle rider experienced slight injuries.
- Incident reference: 2021061094352 – occurred on Saturday 2 October, 2021 at 10:30PM in wet or damp conditions. The incident involved a car on a right hand bend and a pedestrian in the carriageway crossing, from the driver's nearside. The pedestrian experienced serious injuries.
- Incident reference: 2021061094352 – occurred Wednesday 12 January, 2022 at 8:25PM in dark street lit conditions on dry road surface. The incident involved two cars both of which were proceeding normally along the carriageway and travelling in the same direction. From the information provided this appears to be a rear shunt type incident and result in one of the drivers sustaining serious injuries.

3.3.4 The assessment has not highlighted any highway safety concerns which would be exacerbated by the proposed development.

## 4. Accessibility by Sustainable Modes

### 4.1 Overview

4.1.1 This section includes an assessment of the accessibility of the site by sustainable modes of transport, to review the opportunities that exist for residents and visitors by the following modes of transport:

- Pedestrian Accessibility
- Cycle Accessibility
- Accessibility by Bus
- Accessibility by Rail
- Accessibility by Shared Vehicle Platforms (car sharing, clubs, bike sharing)
- Leeds Accessibility Standards

### 4.2 Pedestrian Accessibility

4.2.1 The Planning for Walking Guidance (2015), published by CIHT highlights that “Across Britain about 80 per cent of journeys shorter than 1 mile are made wholly on foot – something that has changed little in 30 years. For journeys that are 1 to 2 miles long, 26 per cent are made on foot (NTS, 2012).”

4.2.2 CIHT notes that people will be willing to walk further to reflect a greater perceived quality or importance of a service or amenity, for example rail services. The report does not provide a definitive view on distances, however, the report makes reference to the IHT publication “Providing for Journeys on Foot,” (2000) which suggests a maximum walking distance for commuting, school and sightseeing as 2000m (25-minute walk).

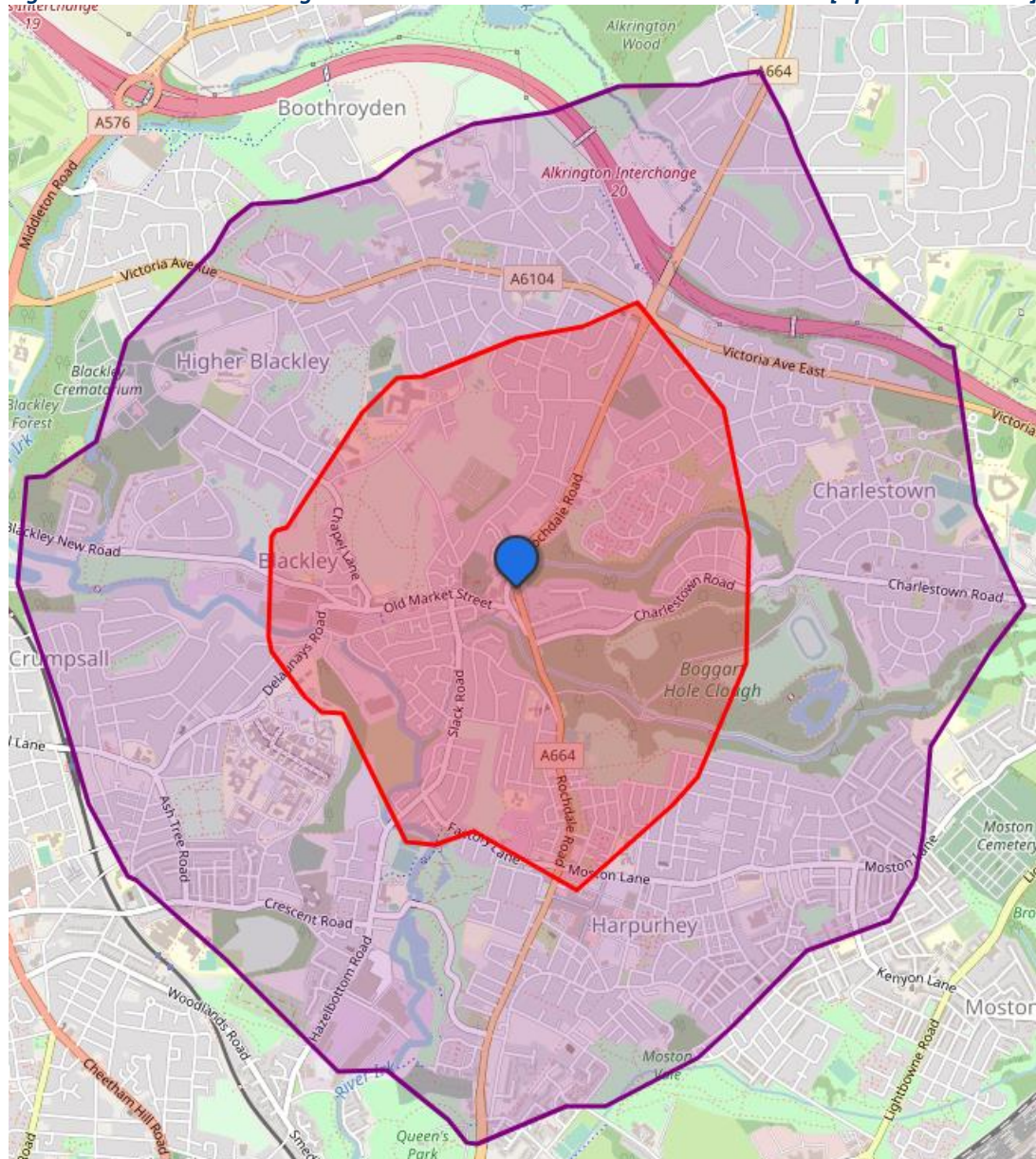
4.2.3 It is also important to consider the routes that would be taken to get to these locations. Building Sustainable Transport into New Developments (DfT, 2008) gives the following advice on pedestrian catchment areas:

*“Walking neighbourhoods are typically characterised as having a range of facilities within 10 minutes’ walking distance (around 800 metres). However, the propensity to walk or cycle is not only influenced by distance but also the quality of the experience; people may be willing to walk or cycle further where their surroundings are more attractive, safe and stimulating.”*

4.2.4 Figure 4 identifies the 1000m and 2000m walking isochrones from the site which indicate areas that should be easily accessible to the site on foot.

**Figure 4 – Indicative Walking Isochrone**

[OpenRouteService]



4.3.1 **Figure 4** illustrates that the surrounding areas of Higher Blackley, Blackley, Harpurhey and Charlestown are all reachable within a preferred maximum walking distance. Within an acceptable 1km walking distance of the site, the following services and amenities are available:

- Local shop, hairdressers, hot and cold food takeaways (75m)
- Texaco convenience store (150m)
- The Grove Inn Pub (150m)
- Bus Stops on Rochdale road and Middleton Old Road (within 200m)
- NHS – Neville Family Medical Centre (200m)
- Damhead Medical Centre (350m)
- Nisa Local, A-Z Convenience Store and Old Market Street Post Office (500m)
- Pike Fold Primary School (650m)

- 4.3.2 In terms of pedestrian infrastructure, all roads in the vicinity of the site are street-lit footways and provide dropped kerbs to enable pedestrians to safely cross the road.

#### **4.4 Cycle Accessibility**

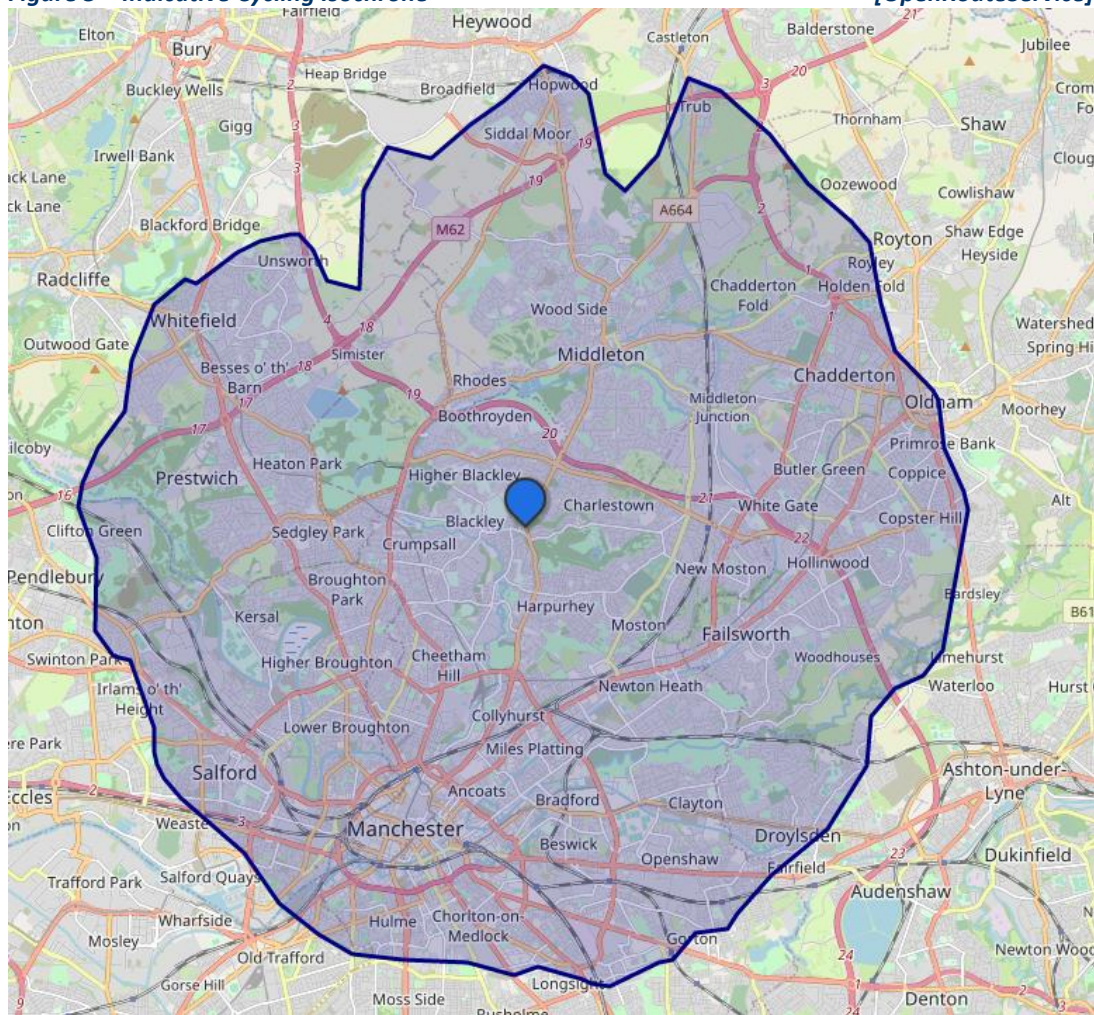
- 4.4.1 Like walking, cycling has an important part to play in reducing congestion, improving accessibility and reducing pollution. Cycling may also allow people without cars to reach destinations that they may otherwise be unable to reach. CIHT's Planning for Cycling (2014) states that:

*"The majority of cycling trips are for short distances, with 80% being less than five miles and with 40% being less than two miles. However, the majority of trips by all modes are also short distances (67% are less than five miles, and 38% are less than two miles); therefore, the bicycle is a potential mode for many of these trips. Electric bicycles extend the range that can be cycled comfortably, and combined cycle-rail or cycle-bus journeys offer an alternative to car travel for many longer trips."*

- 4.4.2 Figure 5 indicates destinations that lie within an 8km cycling isochrone of the site. It is provided as an indication of where destinations lie and the general extent to which the site is accessible by cycle.

**Figure 5 – Indicative Cycling Isochrone**

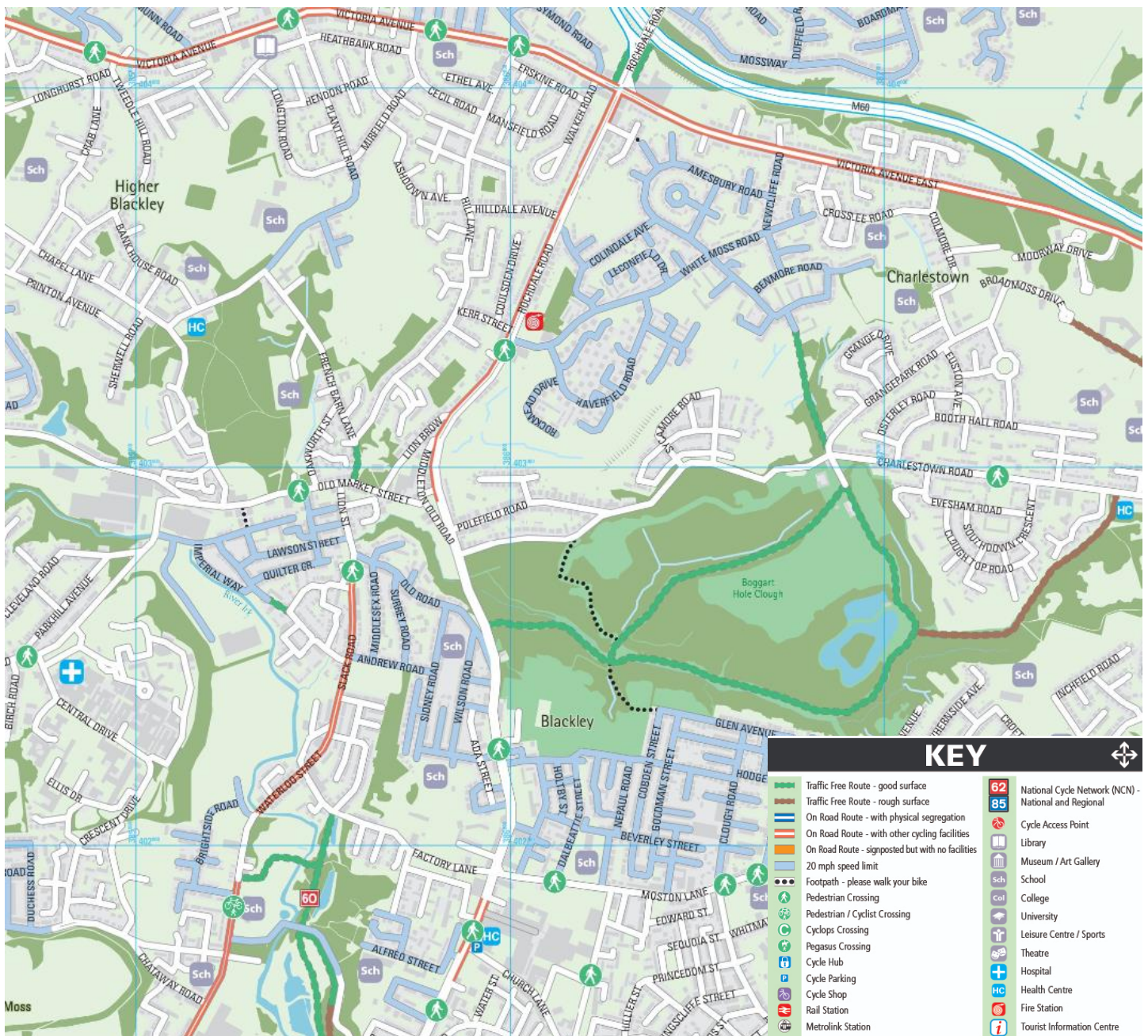
[OpenRouteService]



- 4.4.3 **Figure 5** illustrates that a number of towns, cities and local centres are located within a reasonable cycling distance from the site, including Manchester City Centre, Salford, Middleton, Prestwich and the outskirts of Oldham. However, as with walking, it is considered that the quality of the available cycling infrastructure is an important factor when it comes to accessibility. An extract of the interactive cycling map available on the Transport for Greater Manchester Website is shown in **Figure 6**, overleaf.

**Figure 6 – Extract of Interactive Cycling Map**

**[Transport for Greater Manchester]**



4.4.4 **Figure 6**, shows that there are on road routes and within close proximity to the site and these connect to other cycle facilities which could be used to travel to and from the City Centre.

#### 4.5 **Accessibility by Bus**

4.5.1 The Buses in Urban Developments Guidance (January 2018), published by CIHT outlines that, “the planning of development sites should consider the walking distance to bus stops and the corresponding bus catchment areas.” Figure 7, an extract from the guidance outlines the maximum walking distance for different situations.

**Figure 7 – Recommended Maximum Walking Distances to Bus Stops**

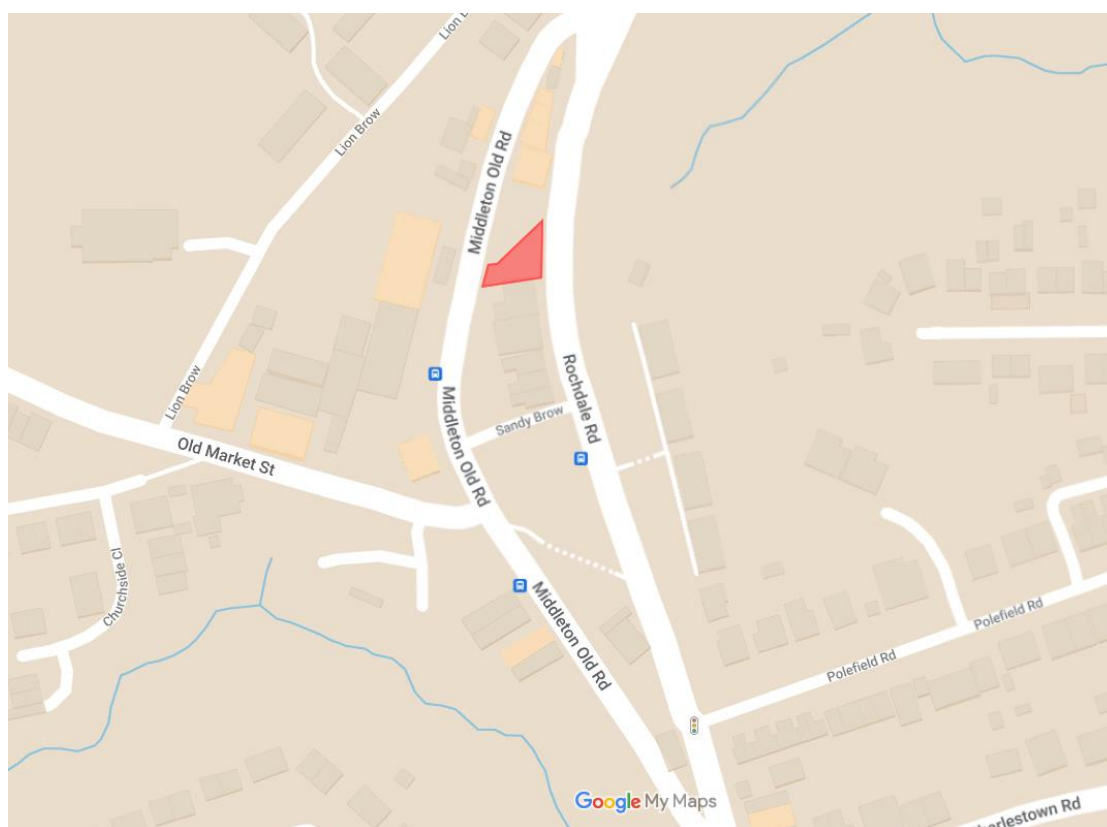
| Situation                                                   | Maximum walking distance |
|-------------------------------------------------------------|--------------------------|
| Core bus corridors with two or more high-frequency services | 500 metres               |
| Single high-frequency routes (every 12 minutes or better)   | 400 metres               |
| Less frequent routes                                        | 300 metres               |
| Town/city centres                                           | 250 metres               |

4.5.2 For new housing developments, Stagecoach’s report *Bus Services and New Residential Developments* (2018) strongly recommends that affordable housing, and higher-density developments are all located within 400m of a bus stop, and preferably closer.

4.5.3 The nearest bus stop to the site is located on Middleton Old Road, approximately 75m from the site boundary. Additional stops are located on Rochdale Road within 200m of the site. **Figure 8** illustrates the location of the nearest bus stops.

**Figure 8 – Location of Bus Stops**

[GoogleMyMaps]



4.5.4 The services available from these stops are provided in the table overleaf:

**Table 1 – Summary of Bus Services**

| Number    | Route                                                                                      | Approximate Peak Frequency |                  |            |
|-----------|--------------------------------------------------------------------------------------------|----------------------------|------------------|------------|
|           |                                                                                            | Mon – Sat Daytime          | Mon- Sat Evening | Sunday     |
| 17/ 17A   | Manchester – Rochdale                                                                      | 15 minutes                 | 15-20 minutes    | 15 minutes |
| 18        | Manchester <i>Royal Infirmary</i> – Langley                                                | 15 minutes                 | 15 minutes       | 30 minutes |
| 53 orbits | Cheetham Hill – Salford                                                                    | 30 minutes                 | 60 minutes       | 60 minutes |
| 118       | Higher Crumpsall – Piccadilly Gardens                                                      | 15 minutes                 | 10-30 minutes    | 30 minutes |
| 149       | Higher Crumpsall <i>North Manchester General Hospital</i> – Royal Oldham Hospital Circular | 60 minutes                 | 60 minutes       | 60 minutes |
| 163       | Manchester <i>Piccadilly</i> – Bury Interchange                                            | 12 minutes                 | 15-30 minutes    | 15 minutes |

4.5.5 As can be seen from table 1, there are frequent bus services available seven days a week, with an average of 20 buses per hour during peak daytime periods, 13-20 buses per hour in the evening and 14 buses per hour on a Sunday. Bus services 17, 18 and 163 runs direct to and from Manchester city centre and the journey takes approximately 16-22 minutes.

#### **4.6 Accessibility by Rail**

4.6.1 The nearest tram station is Crumpsall, approximately 2.4km from the site. This is above the maximum preferred walking distance, but is within an acceptable cycling distance. People who utilise the tram are able to take their bike on board, provided it can be folded. The tram stop is served by the Green Line (Bury – Altrincham) and the Yellow Line (Bury – Piccadilly).

4.6.2 Both the Green Line and Yellow Line run every 12 minutes, resulting in a service every 6 minutes between Crumpsall and central Manchester.

4.6.3 The nearest train station (Moston) is located approximately 3.4km from the site, this is also above the maximum preferred walking distance. However, it does still fall in with a reasonable cycling distance. The cycle parking is relatively small, but does provide 10 cycle stands as storage. Bus service 149 also stops adjacent to this station as the journey takes approx. 10 minutes.

4.6.4 The station is located on the Caldervale Line (Leeds to Manchester and Blackpool) and the Todmorden/Rochdale-Kirkby/ Wigan Walgate Line (Wigan to Kirkby). On Monday to Saturdays, there is now a half-hourly service by Northern Trains in each direction. On Sundays, this is reduced to hourly.

#### **4.7 Accessibility Summary**

4.7.1 The site is considered to be accessible by both active travel and public transport modes. As such, residents will have a realistic choice of sustainable travel options which will reduce the need to travel by car.

## 5. Proposed Development

- 5.1 The proposals are for the construction of five apartments (4 x 1 bedroom and 1 x 2 bedroom). The existing block of flats next to the site are to be retained, and the proposals will be built adjacent to the existing building. A copy of the proposed site plan is attached at **Appendix B**.
- 5.2 The main access to the building will be from Rochdale Road, however, due to the topography of the site the lower ground floor flat will have an access onto Middleton Old Road.
- 5.3 The proposals are for a car free development, with a cycle storage area providing parking for 12 bicycles provided within the lower ground floor of the building, which will therefore be secure and sheltered.
- 5.4 Bin stores will be located within the site with external access from Rochdale Road, so refuse collection can be undertaken from Rochdale as part of the existing collection processes. Deliveries to the retail unit would be from Middleton Old Road.
- 5.5 As detailed in Chapter 4, the location of the site is very accessible by sustainable modes and furthermore bus stops are located within 200m of the site and these offer an excellent level of service, with an average of 20 buses per hour during peak daytime periods, 13-20 buses per hour in the evening and 14 buses per hour on a Sunday. Bus services 17, 18 and 163 runs direct to and from Manchester city centre and the journey takes approximately 16-22 minutes.
- 5.6 To encourage residents of the development to travel to and from the site via alternative means other than the car, a Travel Information Pack can be prepared so that residents are made aware of the sustainable transport alternatives that are available.
- 5.7 Release of this information in the sales particulars of each plot prior to occupation will ensure that all purchasers will be aware of the availability and benefits of sustainable transport at the point of occupation.

## 6. Trip Generation Assessment

### 6.1 Overview

- 6.1.1 In order to derive the average trip rates for the proposed development, the TRICS v7.10.4 database has been interrogated, the search parameters are set out in **Tables 2** and the full TRICS outputs are included at **Appendix C**.

**Table 2 –Proposed Flats Search Parameters**

| Land Use    | Trip Rate Selection Criteria                                                                                                                                                                                                                                                                                                                                                                          |
|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Residential | <ul style="list-style-type: none"> <li>→ Land Use Category: 'Residential – Flats Privately Owned';</li> <li>→ Multimodal trip rate surveys;</li> <li>→ Number of dwellings: 6 – 30;</li> <li>→ Greater London, Northern Ireland and Ireland were excluded;</li> <li>→ Saturday and Sunday surveys were excluded; and,</li> <li>→ Edge of town centre, suburban area edge of town included.</li> </ul> |

### 6.2 Multimodal Trip Generation

- 6.2.1 Table 3 provides details of the multimodal two-way trip rates along with the corresponding modal percentage split and generated trips for the proposed development. The data is split between the typical weekday AM (08:00-09:00) and PM (17:00-18:00) peaks.

**Table 3 – Multimodal Trips for 7 Proposed Apartments**

| Time Period            | Mode of Travel         | Trip Rate | Modal Split | Generations |
|------------------------|------------------------|-----------|-------------|-------------|
| AM Peak<br>08:00-09:00 | Pedestrians            | 0.216     | 23.9%       | 1           |
|                        | Cyclists               | 0.034     | 3.8%        | 0           |
|                        | Public Transport Users | 0.139     | 15.4%       | 1           |
|                        | Vehicle Occupants      | 0.513     | 56.8%       | 3           |
|                        | Total People Trips     | 0.903     | 100.0%      | 5           |
| PM Peak<br>17:00-18:00 | Pedestrians            | 0.258     | 33.0%       | 1           |
|                        | Cyclists               | 0.024     | 3.1%        | 0           |
|                        | Public Transport Users | 0.143     | 18.3%       | 1           |
|                        | Vehicle Occupants      | 0.358     | 45.7%       | 2           |
|                        | Total People Trips     | 0.783     | 100.0%      | 4           |

- 6.2.2 From the above tables, the proposed development use will produce an increase in demand for walking, cycling and public transport use in the network peaks. However, the increase is negligible and the existing infrastructure is considered capable of accommodating proposed trips.

### 6.3 Vehicle Trip Generation

- 6.3.1 Tables 4 provides details of the vehicular trip rates, along with the corresponding generated trips for the proposed development. The data has been split between the typical weekday AM (08:00-09:00) and PM (17:00-18:00) peaks.

**Table 4 – Vehicle Trips from Proposed Flats**

| Time Period            | Trip Rates |            | Generations |            |       |
|------------------------|------------|------------|-------------|------------|-------|
|                        | Arrivals   | Departures | Arrivals    | Departures | Total |
| AM Peak<br>08:00-09:00 | 0.052      | 0.268      | 1*          | 1          | 2     |
| PM Peak<br>17:00-18:00 | 0.167      | 0.094      | 1           | 1*         | 2     |

\*minimum of 1 vehicle

- 6.3.2 The transport impact of the development has been considered in relation to both person trips and vehicle movements, the level of additional movements can readily be accommodated by the existing infrastructure. The predicted vehicle movements from the development are modest and once access to the main highway network is gained would not be discernible against normal daily fluctuations in traffic flow.

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## 7. Summary and Conclusions

- 7.1 Sanderson Associates Consulting Engineers has been appointed by BM and HP Parker Properties Ltd to provide highway consultancy services to support their proposals for the creation of 5 apartments on land adjacent to 1133 Rochdale Road, Blackley.
- 7.2 An investigation into road traffic accidents gives no indication of significant clusters or trends of accidents and it is considered that the development proposals would not have a material adverse impact on the existing accident risk of the local highway network.
- 7.3 The main access to the apartments will be from Rochdale Road and will be a car free developments. A cycle storage area providing parking for 12 bicycles will be provided within the lower ground floor of the building, which will be secure and sheltered.
- 7.4 It is considered that walking, cycling and public transport offer realistic modes of transport for residents and visitors of the development. The site is well located to take advantage of existing pedestrian, cycle and public transport facilities. These modes of transport are provided within the recommended distance as stated in national guidelines. Walking, cycling and public transport have the potential to form part of a longer journey using linked trips.
- 7.5 The additional trips generated by sustainable modes are not severe and are therefore unlikely to have a detrimental impact on the existing infrastructure.
- 7.6 This Transport Statement demonstrates that the development would not have an unacceptable impact on highway safety and the residual cumulative traffic impact would not be severe. The development is therefore in accordance with the transport principles set out in NPPF.
- 7.7 As such, the development should be supported on transportation grounds.



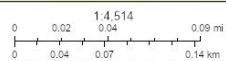
## Appendix A

### Crashmap Summary Report



Area : 20,029.83 m<sup>2</sup>

 Slight  
 Serious



Esri Community Maps Contributors, Esri UK, Esri, TomTom, Garmin, Foursquare, GeoTechnologies, Inc, METI/NASA, USGS, Sources: Esri, Airbus, DG, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS User Community

## Summary

| Name    | Count | Area(m²) | Length(m) |
|---------|-------|----------|-----------|
| Crashes | 5     | N/A      | N/A       |

## Crashes

| # | Carriageway_Hazards | Severity | Officer_Attended                    | Accident_DateTime | Year | Number_of_vehicles | Number_of_casualties | Easting |
|---|---------------------|----------|-------------------------------------|-------------------|------|--------------------|----------------------|---------|
| 1 | None                | Slight   | Police officer attended crash scene | July 5, 2018      | 2018 | 2                  | 1                    | 385764  |
| 2 | None                | Slight   | No officer attended crash scene     | June 28, 2019     | 2019 | 2                  | 1                    | 385830  |
| 3 | None                | Serious  | No officer attended crash scene     | January 12, 2022  | 2022 | 2                  | 1                    | 385799  |
| 4 | None                | Slight   | No officer attended crash scene     | March 15, 2019    | 2019 | 2                  | 1                    | 385799  |
| 5 | None                | Serious  | Police officer attended crash scene | October 2, 2021   | 2021 | 1                  | 1                    | 385826  |

| # | Northing | Highway_Authority | Road_Number | Weather_conditions         | Road_Type          | Road_surface | Speed_Limit | Light_conditions                                 |
|---|----------|-------------------|-------------|----------------------------|--------------------|--------------|-------------|--------------------------------------------------|
| 1 | 402926   | Manchester        | U0          | Fine without high winds    | Single carriageway | Dry          | 30          | Darkness: street lights present and lit          |
| 2 | 402867   | Manchester        | A664        | Fine without high winds    | Single carriageway | Dry          | 30          | Daylight: regardless of presence of streetlights |
| 3 | 402966   | Manchester        | A664        | Fine without high winds    | Single carriageway | Dry          | 30          | Darkness: street lights present and lit          |
| 4 | 403040   | Manchester        | A664        | Fine without high winds    | Single carriageway | Dry          | 30          | Daylight: regardless of presence of streetlights |
| 5 | 402865   | Manchester        | A664        | Raining without high winds | Single carriageway | Wet or Damp  | 30          | Darkness: street lights present and lit          |

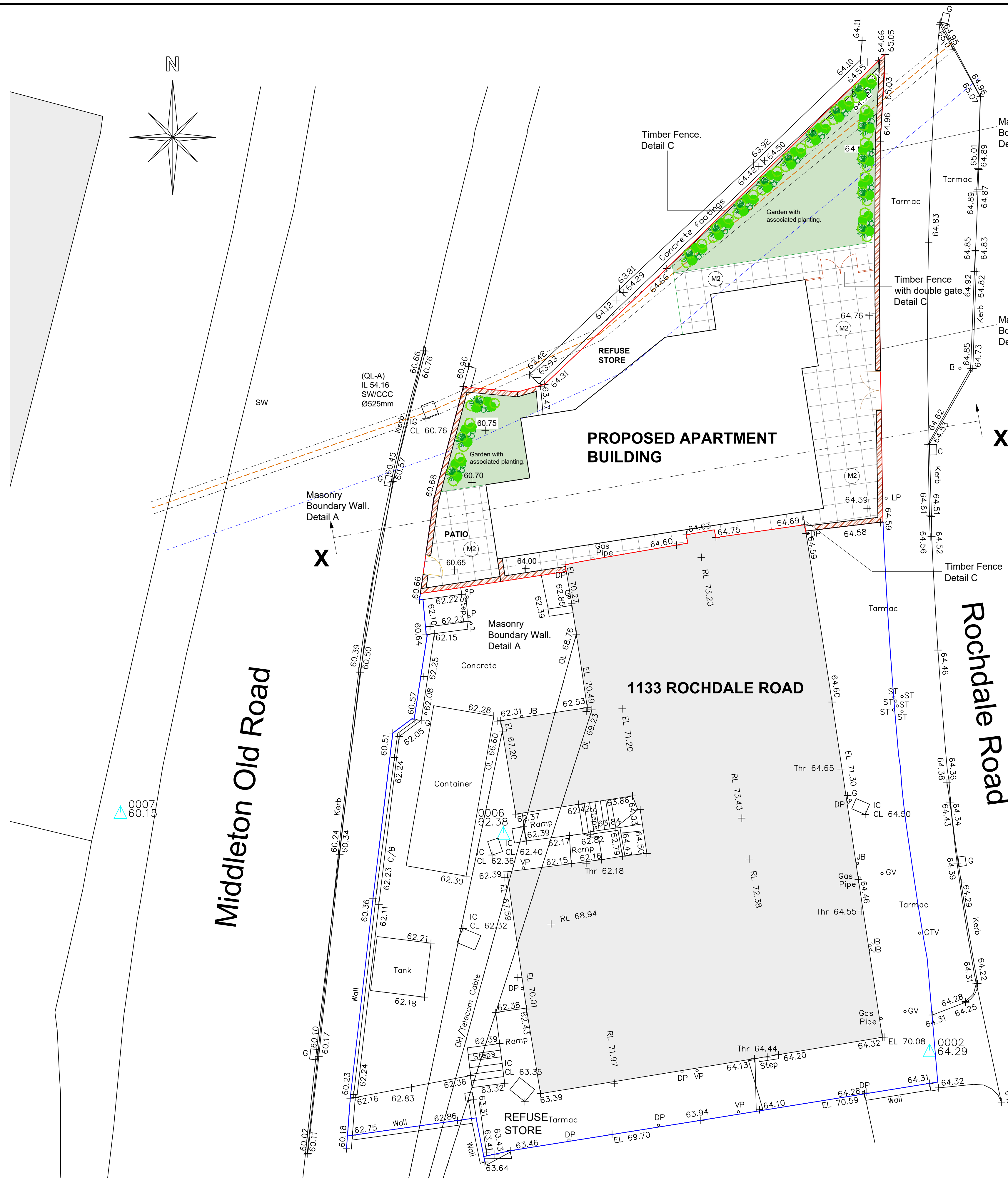
| # | Junction_detail                        | Pedestrian_Crossing                            | Involved_pedalcycle | Involved_Motorcycle | Pedestrian_casualty | Child_casualty | Pedal_cycleuser_casualty | Motorcycle_user_casualty |
|---|----------------------------------------|------------------------------------------------|---------------------|---------------------|---------------------|----------------|--------------------------|--------------------------|
| 1 | T or staggered junction                | No physical crossing facility within 50 metres | 0                   | 0                   | 0                   | 0              | 0                        | 0                        |
| 2 | Not at or within 20 metres of junction | No physical crossing facility within 50 metres | 1                   | 0                   | 0                   | 0              | 1                        | 0                        |
| 3 | Not at or within 20 metres of junction | No physical crossing facility within 50 metres | 0                   | 0                   | 0                   | 0              | 0                        | 0                        |
| 4 | Not at or within 20 metres of junction | Central refuge - no other controls             | 0                   | 1                   | 0                   | 0              | 0                        | 0                        |
| 5 | Not at or within 20 metres of junction | No physical crossing facility within 50 metres | 0                   | 0                   | 1                   | 0              | 0                        | 0                        |

| # | Involved_car | Involved_goodsvehicle | Involved_Bus | Involved_young_driver | Local_Authority_District | Junction_control         | Is_Provisional | Is_Amended | Web_Link                                                                                                                                                            | Count |
|---|--------------|-----------------------|--------------|-----------------------|--------------------------|--------------------------|----------------|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|
| 1 | 1            | 0                     | 0            | 0                     | Manchester               | Give way or uncontrolled | No             | No         | <a href="https://www.crashmap.co.uk/reports/prereportservice?reportId=201806A245870">https://www.crashmap.co.uk/reports/prereportservice?reportId=201806A245870</a> | 1     |
| 2 | 1            | 0                     | 0            | 0                     | Manchester               | Not Applicable           | No             | No         | <a href="https://www.crashmap.co.uk/reports/prereportservice?reportId=201906A259000">https://www.crashmap.co.uk/reports/prereportservice?reportId=201906A259000</a> | 1     |
| 3 | 1            | 0                     | 0            | 1                     | Manchester               | Not Applicable           | No             | No         | <a href="https://www.crashmap.co.uk/reports/prereportservice?reportId=2022061131292">https://www.crashmap.co.uk/reports/prereportservice?reportId=2022061131292</a> | 1     |
| 4 | 0            | 0                     | 0            | 0                     | Manchester               | Not Applicable           | No             | No         | <a href="https://www.crashmap.co.uk/reports/prereportservice?reportId=201906A254938">https://www.crashmap.co.uk/reports/prereportservice?reportId=201906A254938</a> | 1     |
| 5 | 1            | 0                     | 0            | 0                     | Manchester               | Not Applicable           | No             | No         | <a href="https://www.crashmap.co.uk/reports/prereportservice?reportId=2021061094352">https://www.crashmap.co.uk/reports/prereportservice?reportId=2021061094352</a> | 1     |



## Appendix B

### Proposed Site Plan

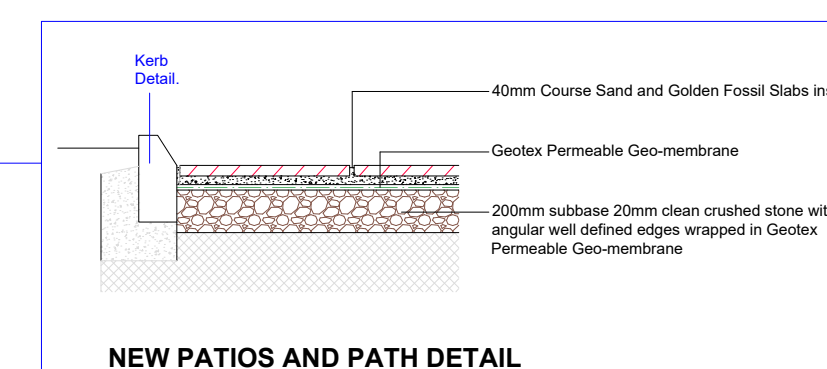
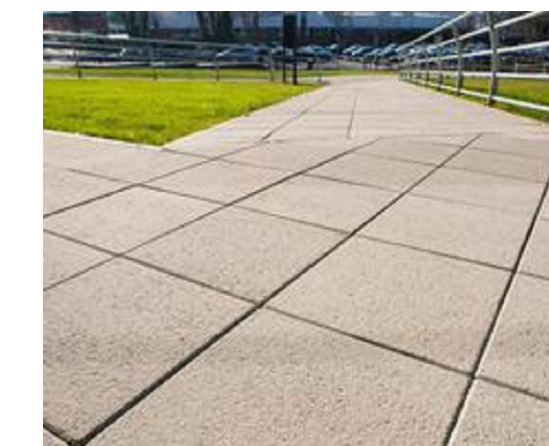
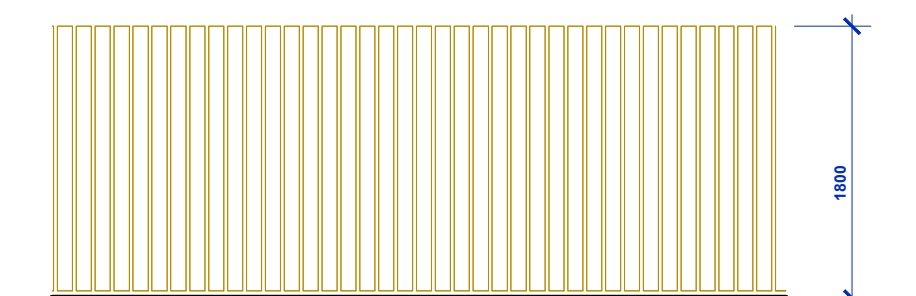
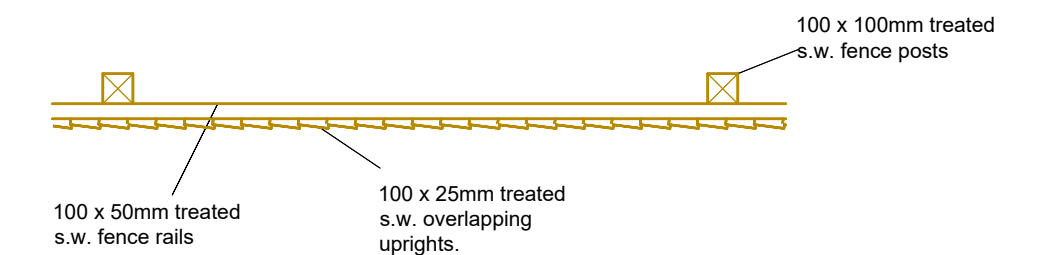
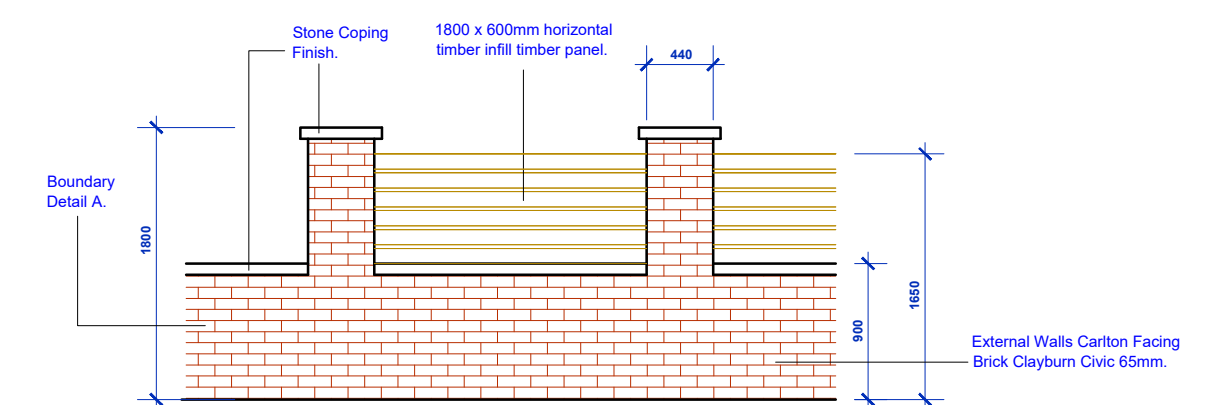
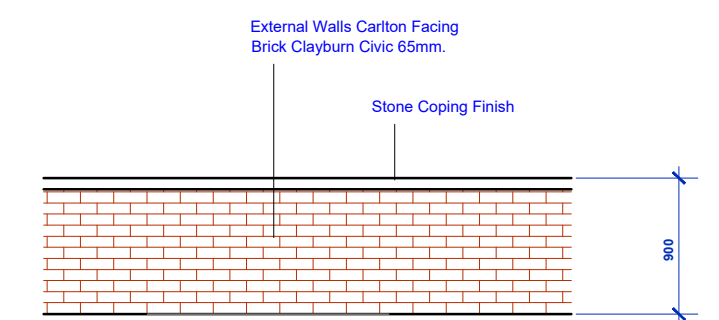


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The contract for the works is between the client and his / her contractor. Contractor to visit site, study the details provided within the drawing and be familiar with both the work to be carried out in accordance with the details provided. Any stated dimensions are to be checked to the form of the work and materials to comply with all relevant British Standards and carry a genuine BBA certificate. The materials specified within this drawing are a guide for the contractor as they are recognised materials and the contractor is responsible for the materials that the contractor who decides to use any different materials that those specified. This drawing must reflect on James Campbell Associates Ltd.

Any discrepancies discovered or items found that were not visible at the time of the initial survey should be reported to James Campbell Associates Ltd for consultation with our client.





## Appendix C

TRICS outputs

Calculation Reference: AUDIT-109307-240212-0221

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL  
Category : C - FLATS PRIVATELY OWNED  
MULTI-MODAL TOTAL VEHICLES

|                                    |                         |        |
|------------------------------------|-------------------------|--------|
| <u>Selected regions and areas:</u> |                         |        |
| 02                                 | SOUTH EAST              |        |
|                                    | CT CENTRAL BEDFORDSHIRE | 1 days |
| 05                                 | EAST MIDLANDS           |        |
|                                    | DY DERBY                | 1 days |
|                                    | NG NOTTINGHAM           | 1 days |
| 08                                 | NORTH WEST              |        |
|                                    | MS MERSEYSIDE           | 1 days |
| 09                                 | NORTH                   |        |
|                                    | TW TYNE & WEAR          | 1 days |
| 10                                 | WALES                   |        |
|                                    | CO CONWY                | 1 days |
| 11                                 | SCOTLAND                |        |
|                                    | EB CITY OF EDINBURGH    | 1 days |
|                                    | HI HIGHLAND             | 1 days |

## Primary Filtering selection:

Parameter: No of Dwellings  
 Actual Range: 9 to 62 (units: )  
 Range Selected by User: 6 to 75 (units: )

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/15 to 19/04/23

Selected survey days:

|           |        |
|-----------|--------|
| Monday    | 1 days |
| Tuesday   | 4 days |
| Wednesday | 2 days |
| Friday    | 1 days |

Selected survey types:

|                       |        |
|-----------------------|--------|
| Manual count          | 8 days |
| Directional ATC Count | 0 days |

Selected Locations:

|                                    |   |
|------------------------------------|---|
| Edge of Town Centre                | 3 |
| Suburban Area (PPS6 Out of Centre) | 4 |
| Edge of Town                       | 1 |

Selected Location Sub Categories:

|                  |   |
|------------------|---|
| Development Zone | 1 |
| Residential Zone | 5 |
| Built-Up Zone    | 1 |
| No Sub Category  | 1 |

Inclusion of Servicing Vehicles Counts:

|                             |                   |
|-----------------------------|-------------------|
| Servicing vehicles Included | 8 days - Selected |
| Servicing vehicles Excluded | 4 days - Selected |

## Secondary Filtering selection:

Use Class:

|    |        |
|----|--------|
| C3 | 8 days |
|----|--------|

Population within 500m Range:

All Surveys Included

Population within 1 mile:

|                  |        |
|------------------|--------|
| 1,001 to 5,000   | 1 days |
| 5,001 to 10,000  | 1 days |
| 10,001 to 15,000 | 1 days |
| 20,001 to 25,000 | 2 days |
| 25,001 to 50,000 | 3 days |

Population within 5 miles:

|                    |        |
|--------------------|--------|
| 25,001 to 50,000   | 1 days |
| 50,001 to 75,000   | 2 days |
| 125,001 to 250,000 | 1 days |
| 250,001 to 500,000 | 3 days |
| 500,001 or More    | 1 days |

Car ownership within 5 miles:

|            |        |
|------------|--------|
| 0.6 to 1.0 | 3 days |
| 1.1 to 1.5 | 5 days |

Secondary Filtering selection (Cont.):

Travel Plan:

No

8 days

PTAL Rating:

No PTAL Present

8 days

LIST OF SITES relevant to selection parameters

|   |                                                                                                                        |                      |
|---|------------------------------------------------------------------------------------------------------------------------|----------------------|
| 1 | CO-03-C-01<br>BLOCKS OF FLATS<br>MOSTYN BROADWAY<br>LLANDUDNO                                                          | CONWY                |
|   | Edge of Town Centre<br>Built-Up Zone<br>Total No of Dwellings: 37<br>Survey date: MONDAY 26/03/18                      | Survey Type: MANUAL  |
| 2 | CT-03-C-02<br>BLOCKS OF FLATS<br>STANBRIDGE ROAD<br>LEIGHTON BUZZARD                                                   | CENTRAL BEDFORDSHIRE |
|   | Edge of Town Centre<br>Residential Zone<br>Total No of Dwellings: 62<br>Survey date: TUESDAY 15/05/18                  | Survey Type: MANUAL  |
| 3 | DY-03-C-03<br>BLOCKS OF FLATS<br>CAESAR STREET<br>DERBY                                                                | DERBY                |
|   | Suburban Area (PPS6 Out of Centre)<br>Residential Zone<br>Total No of Dwellings: 30<br>Survey date: WEDNESDAY 25/09/19 | Survey Type: MANUAL  |
| 4 | EB-03-C-01<br>BLOCKS OF FLATS<br>MYRESIDE ROAD<br>EDINBURGH<br>CRAIGLOCKHART                                           | CITY OF EDINBURGH    |
|   | Suburban Area (PPS6 Out of Centre)<br>Residential Zone<br>Total No of Dwellings: 32<br>Survey date: TUESDAY 26/05/15   | Survey Type: MANUAL  |
| 5 | HI-03-C-02<br>BLOCK OF FLATS<br>KING STREET<br>NAIRN                                                                   | HIGHLAND             |
|   | Edge of Town Centre<br>Residential Zone<br>Total No of Dwellings: 16<br>Survey date: WEDNESDAY 19/04/23                | Survey Type: MANUAL  |
| 6 | MS-03-C-03<br>BLOCK OF FLATS<br>MARINERS WHARF<br>LIVERPOOL<br>QUEENS DOCK                                             | MERSEYSIDE           |
|   | Suburban Area (PPS6 Out of Centre)<br>Development Zone<br>Total No of Dwellings: 9<br>Survey date: TUESDAY 13/11/18    | Survey Type: MANUAL  |
| 7 | NG-03-C-01<br>HOUSES (SPLIT INTO FLATS)<br>LAWRENCE WAY<br>NOTTINGHAM                                                  | NOTTINGHAM           |
|   | Suburban Area (PPS6 Out of Centre)<br>No Sub Category<br>Total No of Dwellings: 56<br>Survey date: TUESDAY 08/11/16    | Survey Type: MANUAL  |
| 8 | TW-03-C-01<br>BLOCKS OF FLATS<br>CAULDWELL AVENUE<br>WHITLEY BAY<br>MONKESEATON                                        | TYNE & WEAR          |
|   | Edge of Town<br>Residential Zone<br>Total No of Dwellings: 45<br>Survey date: FRIDAY 15/10/21                          | Survey Type: MANUAL  |

MANUALLY DESELECTED SITES

| Site Ref   | Reason for Deselection |
|------------|------------------------|
| HF-03-C-01 | Covid Restrictions     |
| HF-03-C-05 | Covid Restrictions     |
| MS-03-C-04 | Covid Restrictions     |

MANUALLY DESELECTED SITES (Cont.)

| Site Ref   | Reason for Deselection |
|------------|------------------------|
| SF-03-C-05 | Covid Restrictions     |

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

MULTI-MODAL TOTAL VEHICLES

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Total People to Total Vehicles ratio (all time periods and directions): 2.56

| Time Range    | ARRIVALS |             |           | DEPARTURES |             |           | TOTALS   |             |           |
|---------------|----------|-------------|-----------|------------|-------------|-----------|----------|-------------|-----------|
|               | No. Days | Ave. DWELLS | Trip Rate | No. Days   | Ave. DWELLS | Trip Rate | No. Days | Ave. DWELLS | Trip Rate |
| 00:00 - 01:00 |          |             |           |            |             |           |          |             |           |
| 01:00 - 02:00 |          |             |           |            |             |           |          |             |           |
| 02:00 - 03:00 |          |             |           |            |             |           |          |             |           |
| 03:00 - 04:00 |          |             |           |            |             |           |          |             |           |
| 04:00 - 05:00 |          |             |           |            |             |           |          |             |           |
| 05:00 - 06:00 |          |             |           |            |             |           |          |             |           |
| 06:00 - 07:00 |          |             |           |            |             |           |          |             |           |
| 07:00 - 08:00 | 8        | 36          | 0.087     | 8          | 36          | 0.195     | 8        | 36          | 0.282     |
| 08:00 - 09:00 | 8        | 36          | 0.052     | 8          | 36          | 0.268     | 8        | 36          | 0.320     |
| 09:00 - 10:00 | 8        | 36          | 0.108     | 8          | 36          | 0.150     | 8        | 36          | 0.258     |
| 10:00 - 11:00 | 8        | 36          | 0.101     | 8          | 36          | 0.139     | 8        | 36          | 0.240     |
| 11:00 - 12:00 | 8        | 36          | 0.105     | 8          | 36          | 0.108     | 8        | 36          | 0.213     |
| 12:00 - 13:00 | 8        | 36          | 0.125     | 8          | 36          | 0.105     | 8        | 36          | 0.230     |
| 13:00 - 14:00 | 8        | 36          | 0.115     | 8          | 36          | 0.118     | 8        | 36          | 0.233     |
| 14:00 - 15:00 | 8        | 36          | 0.063     | 8          | 36          | 0.084     | 8        | 36          | 0.147     |
| 15:00 - 16:00 | 8        | 36          | 0.143     | 8          | 36          | 0.091     | 8        | 36          | 0.234     |
| 16:00 - 17:00 | 8        | 36          | 0.195     | 8          | 36          | 0.105     | 8        | 36          | 0.300     |
| 17:00 - 18:00 | 8        | 36          | 0.167     | 8          | 36          | 0.094     | 8        | 36          | 0.261     |
| 18:00 - 19:00 | 8        | 36          | 0.188     | 8          | 36          | 0.111     | 8        | 36          | 0.299     |
| 19:00 - 20:00 |          |             |           |            |             |           |          |             |           |
| 20:00 - 21:00 |          |             |           |            |             |           |          |             |           |
| 21:00 - 22:00 |          |             |           |            |             |           |          |             |           |
| 22:00 - 23:00 |          |             |           |            |             |           |          |             |           |
| 23:00 - 24:00 |          |             |           |            |             |           |          |             |           |
| Total Rates:  |          |             | 1.449     |            |             | 1.568     |          |             | 3.017     |

Parameter summary

Trip rate parameter range selected:

9 - 62 (units: )

Survey date date range:

01/01/15 - 19/04/23

Number of weekdays (Monday-Friday):

8

Number of Saturdays:

0

Number of Sundays:

0

Surveys automatically removed from selection:

0

Surveys manually removed from selection:

4

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED  
MULTI-MODAL CYCLISTS  
Calculation factor: 1 DWELLS  
BOLD print indicates peak (busiest) period

| Time Range    | ARRIVALS |             |           | DEPARTURES |             |           | TOTALS   |             |           |
|---------------|----------|-------------|-----------|------------|-------------|-----------|----------|-------------|-----------|
|               | No. Days | Ave. DWELLS | Trip Rate | No. Days   | Ave. DWELLS | Trip Rate | No. Days | Ave. DWELLS | Trip Rate |
| 00:00 - 01:00 |          |             |           |            |             |           |          |             |           |
| 01:00 - 02:00 |          |             |           |            |             |           |          |             |           |
| 02:00 - 03:00 |          |             |           |            |             |           |          |             |           |
| 03:00 - 04:00 |          |             |           |            |             |           |          |             |           |
| 04:00 - 05:00 |          |             |           |            |             |           |          |             |           |
| 05:00 - 06:00 |          |             |           |            |             |           |          |             |           |
| 06:00 - 07:00 |          |             |           |            |             |           |          |             |           |
| 07:00 - 08:00 | 8        | 36          | 0.000     | 8          | 36          | 0.010     | 8        | 36          | 0.010     |
| 08:00 - 09:00 | 8        | 36          | 0.003     | 8          | 36          | 0.031     | 8        | 36          | 0.034     |
| 09:00 - 10:00 | 8        | 36          | 0.003     | 8          | 36          | 0.010     | 8        | 36          | 0.013     |
| 10:00 - 11:00 | 8        | 36          | 0.000     | 8          | 36          | 0.014     | 8        | 36          | 0.014     |
| 11:00 - 12:00 | 8        | 36          | 0.003     | 8          | 36          | 0.003     | 8        | 36          | 0.006     |
| 12:00 - 13:00 | 8        | 36          | 0.000     | 8          | 36          | 0.000     | 8        | 36          | 0.000     |
| 13:00 - 14:00 | 8        | 36          | 0.003     | 8          | 36          | 0.000     | 8        | 36          | 0.003     |
| 14:00 - 15:00 | 8        | 36          | 0.003     | 8          | 36          | 0.003     | 8        | 36          | 0.006     |
| 15:00 - 16:00 | 8        | 36          | 0.010     | 8          | 36          | 0.010     | 8        | 36          | 0.020     |
| 16:00 - 17:00 | 8        | 36          | 0.010     | 8          | 36          | 0.000     | 8        | 36          | 0.010     |
| 17:00 - 18:00 | 8        | 36          | 0.017     | 8          | 36          | 0.007     | 8        | 36          | 0.024     |
| 18:00 - 19:00 | 8        | 36          | 0.010     | 8          | 36          | 0.007     | 8        | 36          | 0.017     |
| 19:00 - 20:00 |          |             |           |            |             |           |          |             |           |
| 20:00 - 21:00 |          |             |           |            |             |           |          |             |           |
| 21:00 - 22:00 |          |             |           |            |             |           |          |             |           |
| 22:00 - 23:00 |          |             |           |            |             |           |          |             |           |
| 23:00 - 24:00 |          |             |           |            |             |           |          |             |           |
| Total Rates:  |          |             | 0.062     |            |             | 0.095     |          |             | 0.157     |

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED  
 MULTI-MODAL VEHICLE OCCUPANTS  
 Calculation factor: 1 DWELLS  
 BOLD print indicates peak (busiest) period

| Time Range    | ARRIVALS |             |           | DEPARTURES |             |           | TOTALS   |             |           |
|---------------|----------|-------------|-----------|------------|-------------|-----------|----------|-------------|-----------|
|               | No. Days | Ave. DWELLS | Trip Rate | No. Days   | Ave. DWELLS | Trip Rate | No. Days | Ave. DWELLS | Trip Rate |
| 00:00 - 01:00 |          |             |           |            |             |           |          |             |           |
| 01:00 - 02:00 |          |             |           |            |             |           |          |             |           |
| 02:00 - 03:00 |          |             |           |            |             |           |          |             |           |
| 03:00 - 04:00 |          |             |           |            |             |           |          |             |           |
| 04:00 - 05:00 |          |             |           |            |             |           |          |             |           |
| 05:00 - 06:00 |          |             |           |            |             |           |          |             |           |
| 06:00 - 07:00 |          |             |           |            |             |           |          |             |           |
| 07:00 - 08:00 | 8        | 36          | 0.091     | 8          | 36          | 0.258     | 8        | 36          | 0.349     |
| 08:00 - 09:00 | 8        | 36          | 0.070     | 8          | 36          | 0.443     | 8        | 36          | 0.513     |
| 09:00 - 10:00 | 8        | 36          | 0.129     | 8          | 36          | 0.206     | 8        | 36          | 0.335     |
| 10:00 - 11:00 | 8        | 36          | 0.125     | 8          | 36          | 0.192     | 8        | 36          | 0.317     |
| 11:00 - 12:00 | 8        | 36          | 0.122     | 8          | 36          | 0.164     | 8        | 36          | 0.286     |
| 12:00 - 13:00 | 8        | 36          | 0.171     | 8          | 36          | 0.157     | 8        | 36          | 0.328     |
| 13:00 - 14:00 | 8        | 36          | 0.139     | 8          | 36          | 0.125     | 8        | 36          | 0.264     |
| 14:00 - 15:00 | 8        | 36          | 0.077     | 8          | 36          | 0.091     | 8        | 36          | 0.168     |
| 15:00 - 16:00 | 8        | 36          | 0.237     | 8          | 36          | 0.118     | 8        | 36          | 0.355     |
| 16:00 - 17:00 | 8        | 36          | 0.321     | 8          | 36          | 0.136     | 8        | 36          | 0.457     |
| 17:00 - 18:00 | 8        | 36          | 0.233     | 8          | 36          | 0.125     | 8        | 36          | 0.358     |
| 18:00 - 19:00 | 8        | 36          | 0.307     | 8          | 36          | 0.185     | 8        | 36          | 0.492     |
| 19:00 - 20:00 |          |             |           |            |             |           |          |             |           |
| 20:00 - 21:00 |          |             |           |            |             |           |          |             |           |
| 21:00 - 22:00 |          |             |           |            |             |           |          |             |           |
| 22:00 - 23:00 |          |             |           |            |             |           |          |             |           |
| 23:00 - 24:00 |          |             |           |            |             |           |          |             |           |
| Total Rates:  |          |             | 2.022     |            |             | 2.200     |          |             | 4.222     |

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED  
 MULTI-MODAL PEDESTRIANS  
 Calculation factor: 1 DWELLS  
 BOLD print indicates peak (busiest) period

| Time Range    | ARRIVALS |             |           | DEPARTURES |             |           | TOTALS   |             |           |
|---------------|----------|-------------|-----------|------------|-------------|-----------|----------|-------------|-----------|
|               | No. Days | Ave. DWELLS | Trip Rate | No. Days   | Ave. DWELLS | Trip Rate | No. Days | Ave. DWELLS | Trip Rate |
| 00:00 - 01:00 |          |             |           |            |             |           |          |             |           |
| 01:00 - 02:00 |          |             |           |            |             |           |          |             |           |
| 02:00 - 03:00 |          |             |           |            |             |           |          |             |           |
| 03:00 - 04:00 |          |             |           |            |             |           |          |             |           |
| 04:00 - 05:00 |          |             |           |            |             |           |          |             |           |
| 05:00 - 06:00 |          |             |           |            |             |           |          |             |           |
| 06:00 - 07:00 |          |             |           |            |             |           |          |             |           |
| 07:00 - 08:00 | 8        | 36          | 0.014     | 8          | 36          | 0.136     | 8        | 36          | 0.150     |
| 08:00 - 09:00 | 8        | 36          | 0.052     | 8          | 36          | 0.164     | 8        | 36          | 0.216     |
| 09:00 - 10:00 | 8        | 36          | 0.084     | 8          | 36          | 0.125     | 8        | 36          | 0.209     |
| 10:00 - 11:00 | 8        | 36          | 0.063     | 8          | 36          | 0.084     | 8        | 36          | 0.147     |
| 11:00 - 12:00 | 8        | 36          | 0.059     | 8          | 36          | 0.070     | 8        | 36          | 0.129     |
| 12:00 - 13:00 | 8        | 36          | 0.111     | 8          | 36          | 0.080     | 8        | 36          | 0.191     |
| 13:00 - 14:00 | 8        | 36          | 0.073     | 8          | 36          | 0.091     | 8        | 36          | 0.164     |
| 14:00 - 15:00 | 8        | 36          | 0.070     | 8          | 36          | 0.084     | 8        | 36          | 0.154     |
| 15:00 - 16:00 | 8        | 36          | 0.122     | 8          | 36          | 0.098     | 8        | 36          | 0.220     |
| 16:00 - 17:00 | 8        | 36          | 0.108     | 8          | 36          | 0.084     | 8        | 36          | 0.192     |
| 17:00 - 18:00 | 8        | 36          | 0.185     | 8          | 36          | 0.073     | 8        | 36          | 0.258     |
| 18:00 - 19:00 | 8        | 36          | 0.136     | 8          | 36          | 0.098     | 8        | 36          | 0.234     |
| 19:00 - 20:00 |          |             |           |            |             |           |          |             |           |
| 20:00 - 21:00 |          |             |           |            |             |           |          |             |           |
| 21:00 - 22:00 |          |             |           |            |             |           |          |             |           |
| 22:00 - 23:00 |          |             |           |            |             |           |          |             |           |
| 23:00 - 24:00 |          |             |           |            |             |           |          |             |           |
| Total Rates:  |          |             | 1.077     |            |             | 1.187     |          |             | 2.264     |

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED  
MULTI-MODAL PUBLIC TRANSPORT USERS  
Calculation factor: 1 DWELLS  
BOLD print indicates peak (busiest) period

| Time Range    | ARRIVALS |             |           | DEPARTURES |             |           | TOTALS   |             |           |
|---------------|----------|-------------|-----------|------------|-------------|-----------|----------|-------------|-----------|
|               | No. Days | Ave. DWELLS | Trip Rate | No. Days   | Ave. DWELLS | Trip Rate | No. Days | Ave. DWELLS | Trip Rate |
| 00:00 - 01:00 |          |             |           |            |             |           |          |             |           |
| 01:00 - 02:00 |          |             |           |            |             |           |          |             |           |
| 02:00 - 03:00 |          |             |           |            |             |           |          |             |           |
| 03:00 - 04:00 |          |             |           |            |             |           |          |             |           |
| 04:00 - 05:00 |          |             |           |            |             |           |          |             |           |
| 05:00 - 06:00 |          |             |           |            |             |           |          |             |           |
| 06:00 - 07:00 |          |             |           |            |             |           |          |             |           |
| 07:00 - 08:00 | 8        | 36          | 0.000     | 8          | 36          | 0.038     | 8        | 36          | 0.038     |
| 08:00 - 09:00 | 8        | 36          | 0.003     | 8          | 36          | 0.136     | 8        | 36          | 0.139     |
| 09:00 - 10:00 | 8        | 36          | 0.017     | 8          | 36          | 0.056     | 8        | 36          | 0.073     |
| 10:00 - 11:00 | 8        | 36          | 0.035     | 8          | 36          | 0.035     | 8        | 36          | 0.070     |
| 11:00 - 12:00 | 8        | 36          | 0.031     | 8          | 36          | 0.038     | 8        | 36          | 0.069     |
| 12:00 - 13:00 | 8        | 36          | 0.049     | 8          | 36          | 0.042     | 8        | 36          | 0.091     |
| 13:00 - 14:00 | 8        | 36          | 0.035     | 8          | 36          | 0.042     | 8        | 36          | 0.077     |
| 14:00 - 15:00 | 8        | 36          | 0.042     | 8          | 36          | 0.035     | 8        | 36          | 0.077     |
| 15:00 - 16:00 | 8        | 36          | 0.077     | 8          | 36          | 0.042     | 8        | 36          | 0.119     |
| 16:00 - 17:00 | 8        | 36          | 0.084     | 8          | 36          | 0.024     | 8        | 36          | 0.108     |
| 17:00 - 18:00 | 8        | 36          | 0.122     | 8          | 36          | 0.021     | 8        | 36          | 0.143     |
| 18:00 - 19:00 | 8        | 36          | 0.063     | 8          | 36          | 0.014     | 8        | 36          | 0.077     |
| 19:00 - 20:00 |          |             |           |            |             |           |          |             |           |
| 20:00 - 21:00 |          |             |           |            |             |           |          |             |           |
| 21:00 - 22:00 |          |             |           |            |             |           |          |             |           |
| 22:00 - 23:00 |          |             |           |            |             |           |          |             |           |
| 23:00 - 24:00 |          |             |           |            |             |           |          |             |           |
| Total Rates:  |          |             | 0.558     |            |             | 0.523     |          |             | 1.081     |

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED  
 MULTI-MODAL TOTAL PEOPLE  
 Calculation factor: 1 DWELLS  
 BOLD print indicates peak (busiest) period  
 Total People to Total Vehicles ratio (all time periods and directions): 2.56

| Time Range    | ARRIVALS |             |           | DEPARTURES |             |           | TOTALS   |             |           |
|---------------|----------|-------------|-----------|------------|-------------|-----------|----------|-------------|-----------|
|               | No. Days | Ave. DWELLS | Trip Rate | No. Days   | Ave. DWELLS | Trip Rate | No. Days | Ave. DWELLS | Trip Rate |
| 00:00 - 01:00 |          |             |           |            |             |           |          |             |           |
| 01:00 - 02:00 |          |             |           |            |             |           |          |             |           |
| 02:00 - 03:00 |          |             |           |            |             |           |          |             |           |
| 03:00 - 04:00 |          |             |           |            |             |           |          |             |           |
| 04:00 - 05:00 |          |             |           |            |             |           |          |             |           |
| 05:00 - 06:00 |          |             |           |            |             |           |          |             |           |
| 06:00 - 07:00 |          |             |           |            |             |           |          |             |           |
| 07:00 - 08:00 | 8        | 36          | 0.105     | 8          | 36          | 0.443     | 8        | 36          | 0.548     |
| 08:00 - 09:00 | 8        | 36          | 0.129     | 8          | 36          | 0.774     | 8        | 36          | 0.903     |
| 09:00 - 10:00 | 8        | 36          | 0.233     | 8          | 36          | 0.397     | 8        | 36          | 0.630     |
| 10:00 - 11:00 | 8        | 36          | 0.223     | 8          | 36          | 0.324     | 8        | 36          | 0.547     |
| 11:00 - 12:00 | 8        | 36          | 0.216     | 8          | 36          | 0.275     | 8        | 36          | 0.491     |
| 12:00 - 13:00 | 8        | 36          | 0.331     | 8          | 36          | 0.279     | 8        | 36          | 0.610     |
| 13:00 - 14:00 | 8        | 36          | 0.251     | 8          | 36          | 0.258     | 8        | 36          | 0.509     |
| 14:00 - 15:00 | 8        | 36          | 0.192     | 8          | 36          | 0.213     | 8        | 36          | 0.405     |
| 15:00 - 16:00 | 8        | 36          | 0.446     | 8          | 36          | 0.268     | 8        | 36          | 0.714     |
| 16:00 - 17:00 | 8        | 36          | 0.523     | 8          | 36          | 0.244     | 8        | 36          | 0.767     |
| 17:00 - 18:00 | 8        | 36          | 0.557     | 8          | 36          | 0.226     | 8        | 36          | 0.783     |
| 18:00 - 19:00 | 8        | 36          | 0.516     | 8          | 36          | 0.303     | 8        | 36          | 0.819     |
| 19:00 - 20:00 |          |             |           |            |             |           |          |             |           |
| 20:00 - 21:00 |          |             |           |            |             |           |          |             |           |
| 21:00 - 22:00 |          |             |           |            |             |           |          |             |           |
| 22:00 - 23:00 |          |             |           |            |             |           |          |             |           |
| 23:00 - 24:00 |          |             |           |            |             |           |          |             |           |
| Total Rates:  |          |             | 3.722     |            |             | 4.004     |          |             | 7.726     |



# FAIRHURST



Sanderson House, Jubilee Way, Grange Moor,  
Huddersfield, WF4 4TD



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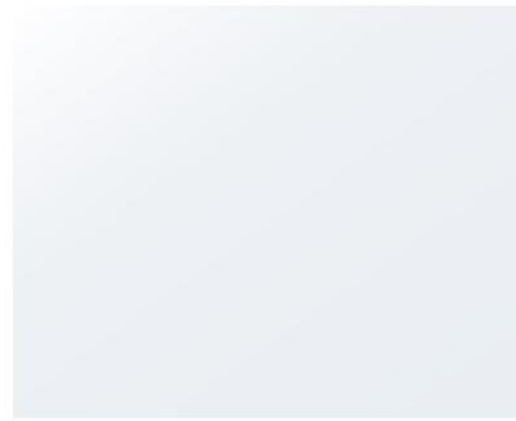


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