

A & K Properties

Bretton Street,  
Dewsbury, WF12 9BS

Transport Statement



## Control Sheet

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 Dewsbury, WF12 9BS  
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## Acknowledgements

Google Map, Google MyMaps, OpenRouteService and OpenCycleMap have been used to generate figures included in this report for illustrative purposes only.

The Crashmap Pro Collision Analysis System v1.40 has been utilised to carry out a road traffic incident review.

A table included in Providing for Journeys on Foot (2000) produced by the Chartered Institution of Highways and Transportation (CIHT) has been included in this report.

The TRICS database v7.11.4 has been used in this report to calculate traffic generations.

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Drawing 165629-002 - Vehicle Swept Path Analysis for 16.5m articulated Vehicle

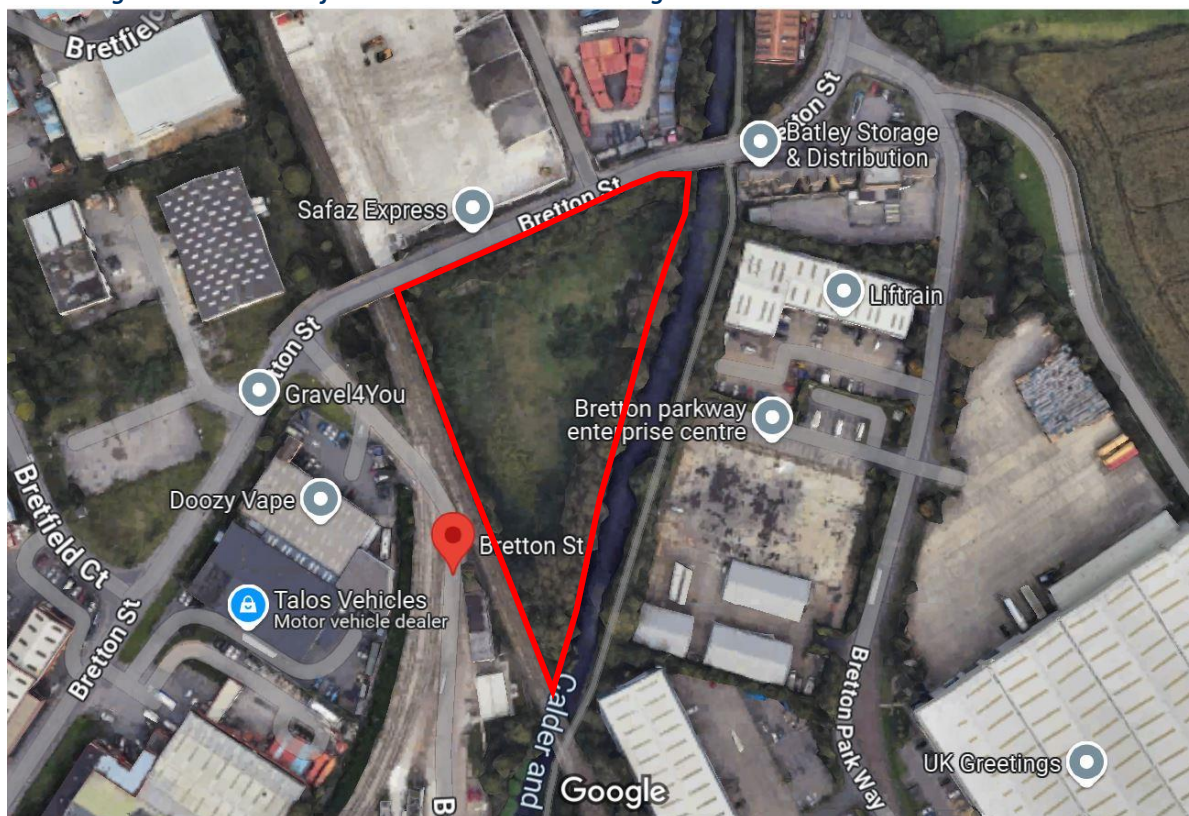
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TRICS Report

## 1. Introduction

- 1.1 Sanderson Associates Consulting Engineers has been appointed by A & K Properties to prepare a Transport Statement in support of development proposals relating to a single industrial / warehouse unit on a plot of land to the south of Bretton Street, Dewsbury WF12 9BS. The location of the site in relation to the surrounding area is shown indicatively on **Figure 1**.

*Figure 1 – Location of site in relation to surrounding area*



- 1.2 In accordance with the National Planning Policy Guidance (NPPG) for the requirements of a Transport Statement, as outlined in 'Travel Plans, Transport Assessments and Statements,' published in March 2014, this report will investigate:
- The local highway network and its highway safety record;
  - The existing use of the site;
  - The proposed development;
  - Accessibility of the site, in relation to local facilities by sustainable modes;
  - The predicted multimodal trip generations; and
  - The impact of the development on the local highway network in terms of highway safety and capacity
- 1.3 This Transport Statement seeks to demonstrate that the development will not have an unacceptable impact on highway safety, that the residual cumulative impacts of the development are not severe in transport terms, and consequently that the planning application should be supported on transport grounds.

## 2. Planning Policy Context

### 2.1 National Planning Policy

#### *National Planning Policy Framework*

2.1.1 At national level, planning policy in England is set out by the National Planning Policy Framework (NPPF), which must be considered when making planning decisions.

2.1.2 Considering the planning policy context of the development, Paragraph 115 of the December 2024 revision (incorporating amendments in February 2025) of the NPPF states that:

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

*a) sustainable transport modes are prioritised taking account of the vision for the site, 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 through a vision-led approach.'*

2.1.3 Paragraph 116 then states:

*'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, following mitigation, would be severe, taking into account all reasonable future scenarios.'*

2.1.4 In relation to paragraph 116, NPPF paragraph 117 goes on to say:

*'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.'

2.1.5 Finally, paragraph 118 states that:

*'All developments that will generate significant amounts of movement should be required to provide a travel plan, and the application should be supported by a vision-led transport statement or transport assessment so that the likely impacts of the proposal can be assessed and monitored.'*

### **National Planning Practice Guidance**

2.1.6 The National Planning Practice Guidance (NPPG) brings together National Planning Policy Framework. It was launched in March 2014 and coincided with the cancelling of the majority of Government Circulars which had previously given guidance on many aspects of planning.

2.1.7 In relation to Transport NPPG provides the following guidance:

- Transport evidence bases in plan making and decision taking - March 2015
- Travel Plans, Transport Assessments and Statements - March 2014

2.1.8 NPPG Transport evidence bases in plan making and decision taking sets out the key issues that local planning authorities should consider in developing the transport base to support the Local Plan, including:

- assess the existing situation and likely generation of trips over time by all modes and the impact on the locality in economic, social and environmental terms;
- assess the opportunities to support a pattern of development that, where reasonable to do so, facilitates the use of sustainable modes of transport;
- highlight and promote opportunities to reduce the need for travel where appropriate;
- identify opportunities to prioritise the use of alternative modes in both existing and new development locations if appropriate;
- consider the cumulative impacts of existing and proposed development on transport networks;
- assess the quality and capacity of transport infrastructure and its ability to meet forecast demands;
- identify the short, medium and long-term transport proposals across all modes.

2.1.9 NPPG *Travel Plans, Transport Assessments and Statements* sets out the key principles that should be taken into account in preparing a Transport Statement. NPPG states that Transport Statements are important as they can positively contribute to:

- encouraging sustainable travel;
- lessening traffic generation and its detrimental impacts;
- reducing carbon emissions and climate impacts;
- creating accessible, connected, inclusive communities;

- improving health outcomes and quality of life;
- improving road safety; and
- reducing the need for new development to increase existing road capacity or provide new roads.

## 2.2 Local Planning Policy

### *Kirklees Council*

- 2.2.1 The Kirklees Local Plan was adopted in February 2019 and is the “*statutory development plan and its purpose is to set out the policies necessary to achieve the strategy and how much new development there should be in the district and where it will go.*”
- 2.2.2 The Local Plan follows NPPF with regards sustainable development with Policy LP1 stating “*When considering development proposals, the council will take a positive approach that reflects the presumption in favour of sustainable development contained in the National Planning Policy Framework. The council will always work pro-actively with applicants jointly to find solutions which mean that proposals can be approved wherever possible, and to secure development that improves the economic, social and environmental conditions in the area.*”
- 2.2.3 As demonstrated in Figure 1, the site is surrounded by employment uses and is vacant land in the urban area.
- 2.2.4 Chapter 10 outlines the policies relating to Transport. **Policy LP20: Sustainable Travel** which outlines the following:

*New development will be located in accordance with the spatial development strategy to ensure the need to travel is reduced and that essential travel needs can be met by forms of sustainable transport other than the private car. The council will support development proposals that can be served by alternative modes of transport such as public transport, cycling and walking and in the case of new residential development is located close to local facilities or incorporates opportunities for day to day activities on site and will accept that variations in opportunity for this will vary between larger and smaller settlements in the area.*

*Travel plans will normally be required for all major planning applications in accordance with current guidance and should set targets and monitoring arrangements to ensure sustainable travel patterns are maintained. Travel plans should include agreed and defined outcomes related to a package of specified measures to be implemented including an approach to lower carbon emissions where applicable.*

*The requirement of a travel plan will also be considered on case by case basis where the proposed development falls below the major application category where it has the potential to generate significant transport movements and/or has insufficient off-street parking within the vicinity of a stressed part of the highway network.*

2.2.5 **Policy LP21: Highways and Access** will also be key to this development as work will need to be completed to create a new access to Bretton Street. The policy outlines:

*Proposals shall demonstrate that they can accommodate sustainable modes of transport and be accessed effectively and safely by all users.*

*New development will normally be permitted where safe and suitable access to the site can be achieved for all people and where the residual cumulative impacts of development are not severe.*

*All proposals shall:*

- ensure the safe and efficient flow of traffic within the development and on the surrounding highway network;
- where needed, provide new infrastructure or improvements on or off site to ensure safe access from the highway network for pedestrians, cyclists, public transport users and private vehicles;
- be accompanied by a supporting Transport Assessment or Transport Statement where the development would generate significant trip generation, providing detail as to the impact on highway safety, air quality, noise and light restrictions;
- take into account changes in site levels and topography to ensure the development can be accessed easily and safely by all sections of the community and by different modes of transport;
- take into account the features of surrounding roads and footpaths and provide adequate layout and visibility to allow the development to be accessed safely;
- take into account access for emergency, service and refuse collection vehicles;
- provide on-site safe, secure and convenient cycle parking/storage facilities to encourage sustainable travel modes.

### ***Parking Standards***

2.2.6 It is understood that the current Kirklees Local Plan (Feb 2019) does not set out parking standards for commercial developments and the standards set out in the previous UDP have been considered with regard to the proposals. These standards establish the maximum level of car parking generally allowable and are as follows:-

- Office: 1 space per 25m<sup>2</sup>
- Industry: 1 space per 50m<sup>2</sup>
- Warehouse Use: 1 space per 150m<sup>2</sup> (Plus provision in accordance with class B1 for any office accommodation)
- Service Vehicles 1 space per 500m<sup>2</sup>

2.2.7 Based on these standards the development could be expected to provide up to 48 parking spaces if solely considered as 'industrial' and up to 16 spaces if solely 'warehouse'. It is understood that these are maximum standards which are from the previous UDP.

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2.2.8 Car parking at the site is proposed at 18 spaces which is inclusive of accessible spaces. EV charging bays will also be provided in accordance with Building Regulations. Cycle parking for 6 cycles is included in the proposals.

**2.3 *West Yorkshire Combined Authority Transport Strategy 2040***

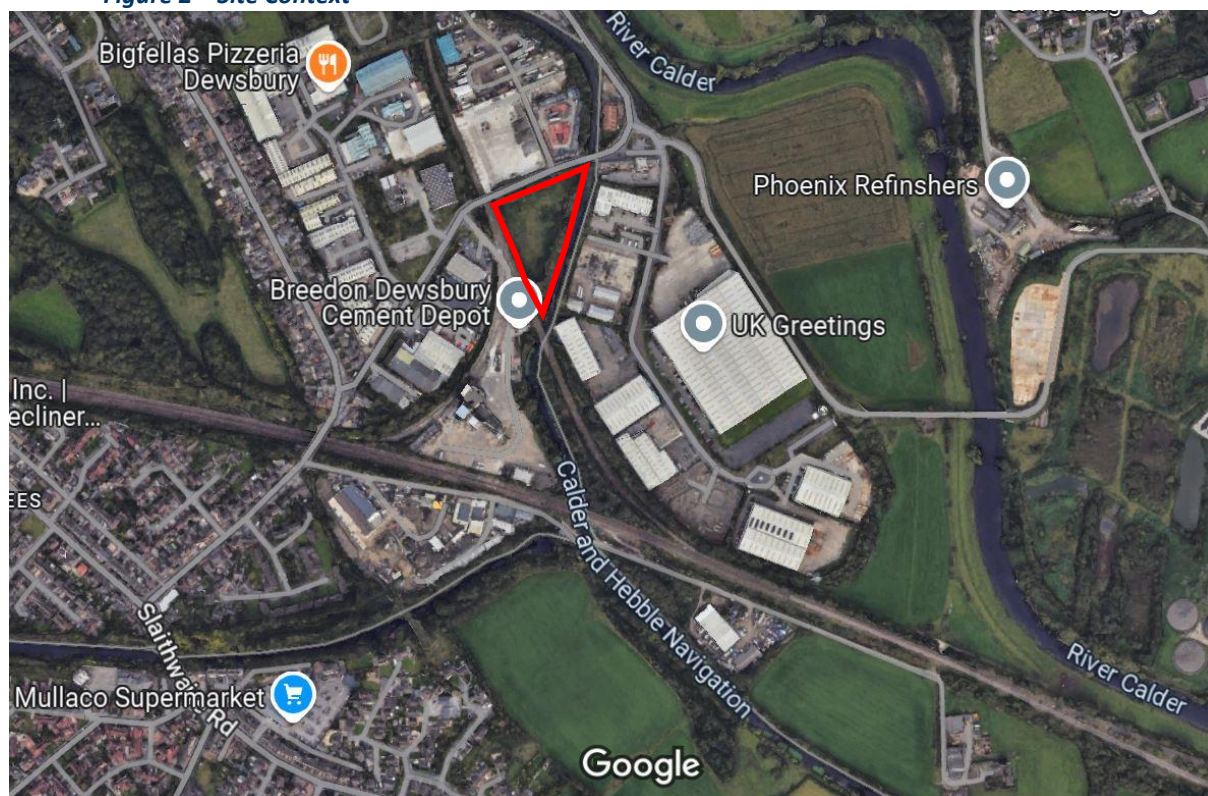
2.3.1 This transport strategy sets out a vision and framework to deliver a world-class, modern, integrated transport system. Their ambition is to connect people to better living standards and higher earning jobs, and to significantly improve the health, overall wellbeing and environment of the people living and working here

### 3. Existing Situation

#### 3.1 The Site

3.1.1 The site is located on the southern side of Bretton Street, Dewsbury WF12 9BS and is indicatively shown with a red edge on **Figure 2**. The land is vacant and is at a lower level than Bretton Street.

**Figure 2 – Site Context**



3.1.2 The site boundaries can approximately be described as:

- North– Bretton Street
- South and East – Calder and Hebble Navigation canal
- West – Railway line

3.1.3 The proposed unit has a building footprint of 2,450sqm with a small first floor office area of 60 sqm. The total floor area is 2,510 sqm. The site layout includes 18 parking spaces inclusive of 1 mobility space. Two spaces for lorry parking are also shown. Cycle parking for 6 cycles is also shown together with a bin store.

### **3.2 Local Highway Network**

- 3.2.1 The site is located off the Bretton Street, which is a single carriageway road with a carriageway width of 7m. In the vicinity of the site, a 2m wide footway is present on either side of the road, and street lighting is also present. The road is subject to a 30-mph speed limit in the vicinity of the site. There is a system of speed management features along Bretton Street adjacent to the site including a speed hump circa 35m west of the proposed access and speed cushions circa 85m east of the proposed access.
- 3.2.2 Bretton Street forms a loop with Mill Street E to the north and Headfield Road to the south-east, connecting to the B6409 to the north and B6117 to the south.
- 3.2.3 The B6409 provides a connection to the A638 and A644 to the north of the site, in Dewsbury Town Centre. The A638 provides access to the M1 and Wakefield City Centre to the east, while the A644 provides access to the M62 to the west.
- 3.2.4 To the south of the site, the B6117 provides access to the A642 which connects Wakefield City Centre to the east with Huddersfield Town Centre to the west.

### **3.3 Road Accident History**

- 3.3.1 National guidance states that a transport statement or assessment 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 Crashmap Pro has been used to analyse road accident data from the national STATS19 database. The most recent 5-year period currently available on Crashmap Pro, covering accidents from 1<sup>st</sup> January 2019 to 31<sup>st</sup> December 2023, has been considered in order to provide a robust assessment.
- 3.3.3 The incident plot diagram showing the assessed area is shown in **Figure 3** whilst the full Crashmap Pro accident report is included at **Appendix A**.

**Figure 3 – Incident plot diagram [Crashmap Pro]**



3.3.4 3 incidents were recorded in the assessed 2019 – 2023 period, consisting of 2 serious incidents and 1 slight incident:

- Incident reference: 2020137BE1831 – occurred on 14<sup>th</sup> November 2020 at 21:34 in dry and clear conditions. A vehicle travelling westbound on Bretton Park Way came off the carriageway and collided with a fence, resulting in the driver receiving serious injuries and a passenger receiving slight injuries.
- Incident reference: 20191369Q1287 – occurred on 26<sup>th</sup> September 2019 at 17:10 in dry and clear conditions. A motorcycle turning left into Bretton Park Way collided with a goods vehicle travelling southbound on Bretton Street, resulting in the motorcycle rider receiving serious injuries.
- Incident reference: 20191362D0325 – occurred on 13<sup>th</sup> February 2019 at 08:12 in dry and clear conditions. A car turning right into Bretton Park Way collided with a vehicle travelling westbound on Bretton Park Way, resulting in the driver of the second vehicle receiving slight injuries.

3.3.5 All three incidents occurred in the vicinity the Bretton Street/Bretton Park Way junction as opposed to the proposed site access. It is considered that the incidents that have occurred on the T - junction have been caused by driver error and are not indicative of any deficiency in the highway network.

### **3.4 Vehicle Speeds and Visibility**

3.4.1 On Thursday 14<sup>th</sup> March 2025, a site visit was undertaken by Sanderson Associates Consulting Engineers during which a speed survey was conducted to establish the speeds at which vehicles travel on Bretton Street and subsequently confirm the required visibility from the proposed site access.

3.4.2 **Table 1** shows a summary of the speed survey detailing the calculated 85<sup>th</sup> Percentile speed and required visibility in each direction. A full copy of the speed survey results is given in **Appendix B**.

*Table 1 – Summary of Speed Survey Results*

Direction of Travel	Direction of Visibility	85th Percentile Speed (mph)	Stopping Sight Distance (m)
Eastbound	To Left	23.2	30.1
Westbound	To Right	22.5	28.9

3.4.3 It was observed during the speed survey that, due to the position of the site between a bridge and a bend in the road, and due to speed humps being present in the vicinity of the site access, that vehicles generally travelled under the speed limit of 30 mph. The recorded 85<sup>th</sup> percentile speed for eastbound traffic was 23.2 mph, corresponding to a visibility requirement of 30.1m to the left of the site access, and the recorded 85<sup>th</sup> percentile speed for westbound traffic was 22.5 mph, corresponding to a visibility requirement of 28.9m to the right of the site access. Visibility measurements taken during the site visit confirmed that there was sufficient visibility in either direction, provided that the vegetation around the site access does not become overgrown.

## 4. Proposed Development

### 4.1 Overview

- 4.1.1 The proposed unit has a building footprint of 2,450sqm with a small first floor office area of 60 sqm. The total floor area is 2,510 sqm. The site layout includes 18 parking spaces inclusive of 1 mobility space. Two spaces for lorry parking are also shown. Cycle parking for 6 cycles is also shown together with a bin store. The proposed ground floor plan (Drawing 103) and proposed site plan (Drawing 102) are included in **Appendix C**.

### 4.2 Access

- 4.2.1 Currently there is no apparent vehicular or pedestrian access to the land from Bretton Street. Although there is an existing dropped kerb just to the west of the proposed site access. A new access is proposed from Bretton Street approximately 43m west of the canal bridge. Pedestrian, cyclist and vehicle would be from the new access.
- 4.2.2 For access onto a road with vehicle speeds of 30-mph, Manual for Streets recommends a stopping sight distance (SSD) of 43 metres (adjusted for a bonnet length of 2.4m). Sanderson Associates Consulting Engineers undertook a speed survey on Thursday 14th March 2025 to consider the recommended visibility for the proposed access. The results of the speed survey and recommended visibility is shown in Table 1. The recorded 85th percentile speed for eastbound traffic was 23.2 mph, corresponding to a visibility requirement of 30.1m to the left of the site access, and the recorded 85th percentile speed for westbound traffic was 22.5 mph, corresponding to a visibility requirement of 28.9m to the right of the site access. These visibility splays can be provided on the site frontage.

### 4.3 Car Parking

- 4.3.1 Car parking at the site is proposed at 18 spaces which is inclusive of accessible spaces. EV charging bays will also be provided in accordance with Building Regulations.
- 4.3.2 Parking standards for Kirklees Council are considered in section 2.2 of this report.

### 4.4 Cycle Parking

- 4.4.1 The proposed development will provide Cycle parking for 6 cycles.

### 4.5 Servicing

- 4.5.1 It is considered that the main servicing requirement of the development is for refuse collection.

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4.5.2 Vehicle tracking has been undertaken to confirm that a refuse vehicle would have sufficient space to turn in the service yard for the unit. This is shown in drawing 165905-001 included in **Appendix D**. In addition the swept path of an articulated vehicle accessing the unit has been considered and this is shown on drawing 165905-002 a copy of which is in **Appendix D**.

## 5. Accessibility by Sustainable Modes of Transport

### 5.1 Overview

- 5.1.1 This section of the Transport Statement includes an assessment of the accessibility of the site by sustainable modes of transport.
- 5.1.2 This section considers the accessibility of the development by the following modes of transport:
- Walking
  - Cycling
  - Public Transport (Bus and Train)

### 5.2 Accessibility by Walking

- 5.2.1 Walking is a sustainable mode of transport that can replace certain local car trips which contribute to congestion and pollution. As a mode of active travel, walking offers physical benefits and has also been linked to improvements in mental wellbeing.
- 5.2.2 The length of a journey a person considers to be ‘walkable’ often depends on the purpose of that journey. The CIHT publication *Providing for Journeys on Foot* has produced guidelines on suggested acceptable walking distances for varying journey purposes, shown in **Figure 4**.

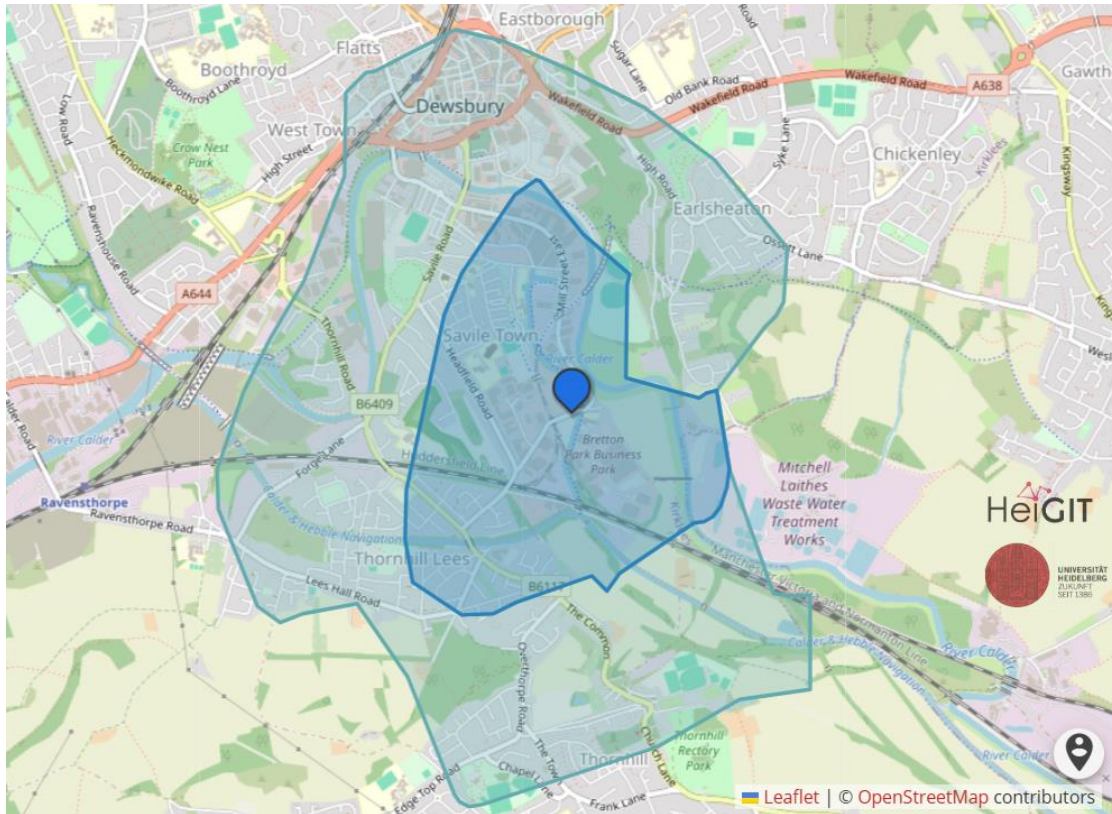
**Figure 4 – Extract from *Providing for Journeys on Foot, Walking Distances* [CIHT]**

**Table 3.2: Suggested Acceptable Walking Distance.**

	Town centres (m)	Commuting/School Sight-seeing (m)	Elsewhere (m)
Desirable	200	500	400
Acceptable	400	1000	800
Preferred maximum	800	2000	1200

- 5.2.3 **Figure 5** identifies 1000m and 2000m walking isochrones centred on the site, providing an illustration of the areas that potential residents of the development may consider to be within walking distance, in line with the ‘preferred maximum’ walking distances for commuting, school and sight-seeing.

**Figure 5 – Indicative Walking Isochrone (1000m and 2000m) [OpenRouteService]**



- 5.2.4 The site is considered to be in a walkable location, with the areas of Savile Town, Thornhill Lees, Earlsheaton and central Dewsbury being located within a 2000m walking catchment of the site, making walking a suitable mode of transport for customers and staff living in these areas.
- 5.2.5 Facilities and amenities located within a 1000m walk of the site include:
- Bretton Park Business Park
  - Paradise Primary School
  - Pentland Infant and Nursery School
  - Savile Town CofE Voluntary Controlled Infant and Nursery School
  - Madni Academy
  - Mullaco supermarket
  - Savile Town Post Office
- 5.2.6 While there are many local facilities and amenities sitting within walking distance of the site, the quality and availability of pedestrian infrastructure must also be considered when determining the site accessibility.
- 5.2.7 Footways are present on both sides of Bretton Street. The street has street lighting available, and dropped kerbs are present at crossing points to allow for easier crossing.

### 5.3 Accessibility by Cycling

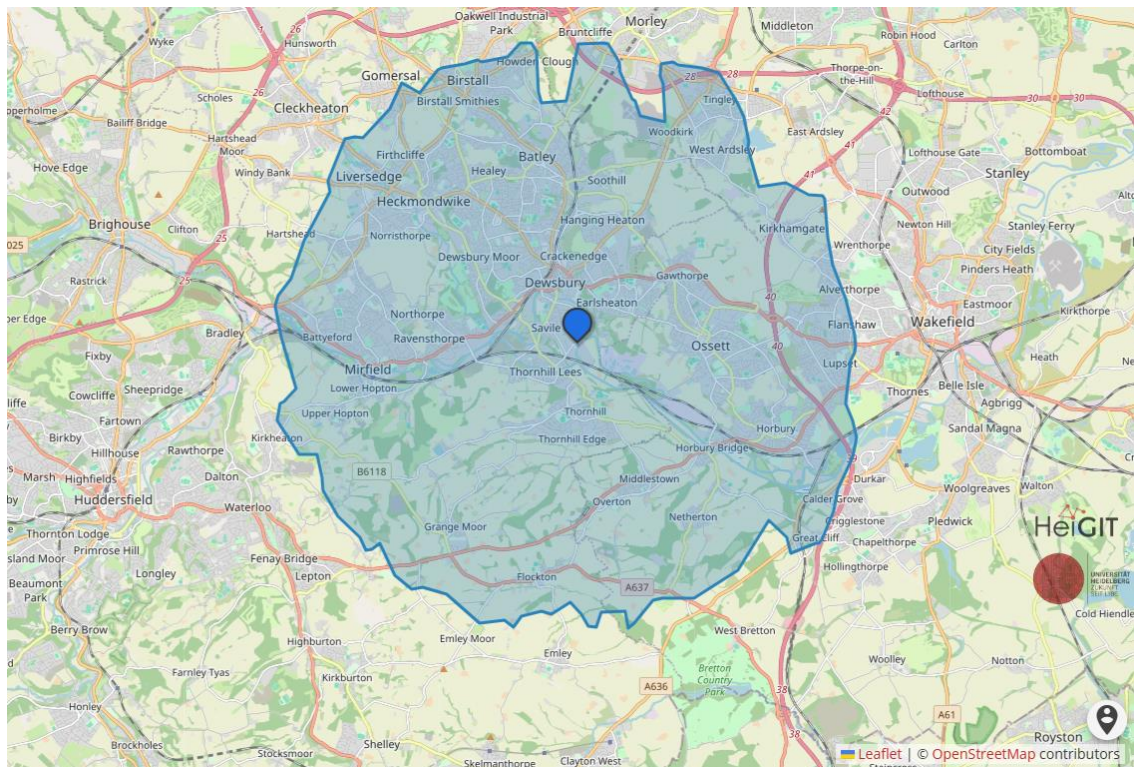
5.3.1 As with walking, cycling is an active and sustainable mode of transport that can be used to replace private cars on certain journeys, which reduces congestion and pollution. A bicycle is generally a lot cheaper than a car to purchase and maintain, meaning cycling can also provide social equity benefits, such as allowing people without cars access to destinations they may otherwise be unable to reach.

5.3.2 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.”*

5.3.3 A 5-mile (~8000m) journey by cycle is considered to be achievable by many people. **Figure 6** identifies destinations that lie within 8000m of the site access.

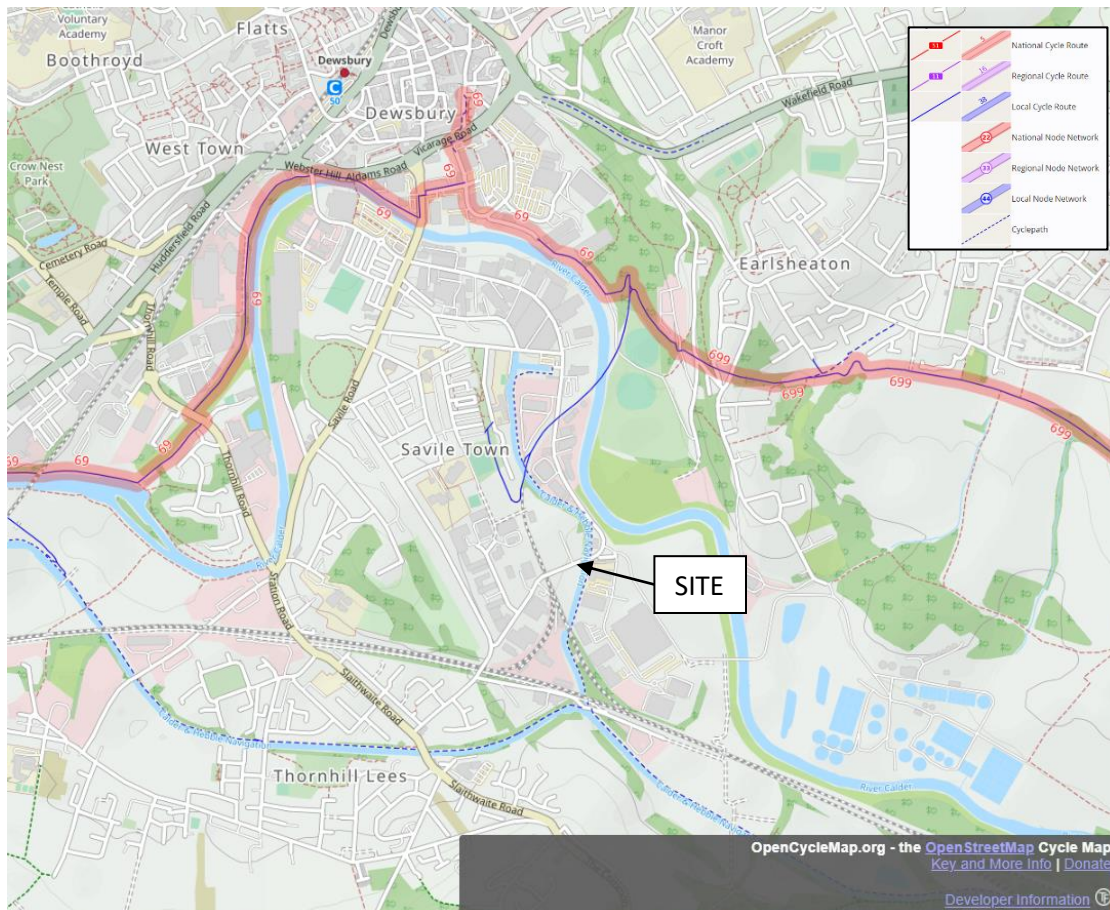
**Figure 6 – Indicative Cycling Isochrone (8000m) [OpenRouteService]**



5.3.4 The areas of Dewsbury, Mirfield, Ossett, Batley, Heckmondwike and Liversedge are all located within an 8000m cycle catchment of the site, making cycle an appropriate mode of transport for customers and staff travelling from these areas.

5.3.5 As with walking, the quality and availability of cycling infrastructure is a key factor when considering accessibility by cycle. **Figure 7** shows a map detailing the cycling infrastructure available near the site.

**Figure 7 – Cycle Infrastructure available near site [OpenCycleMap]**

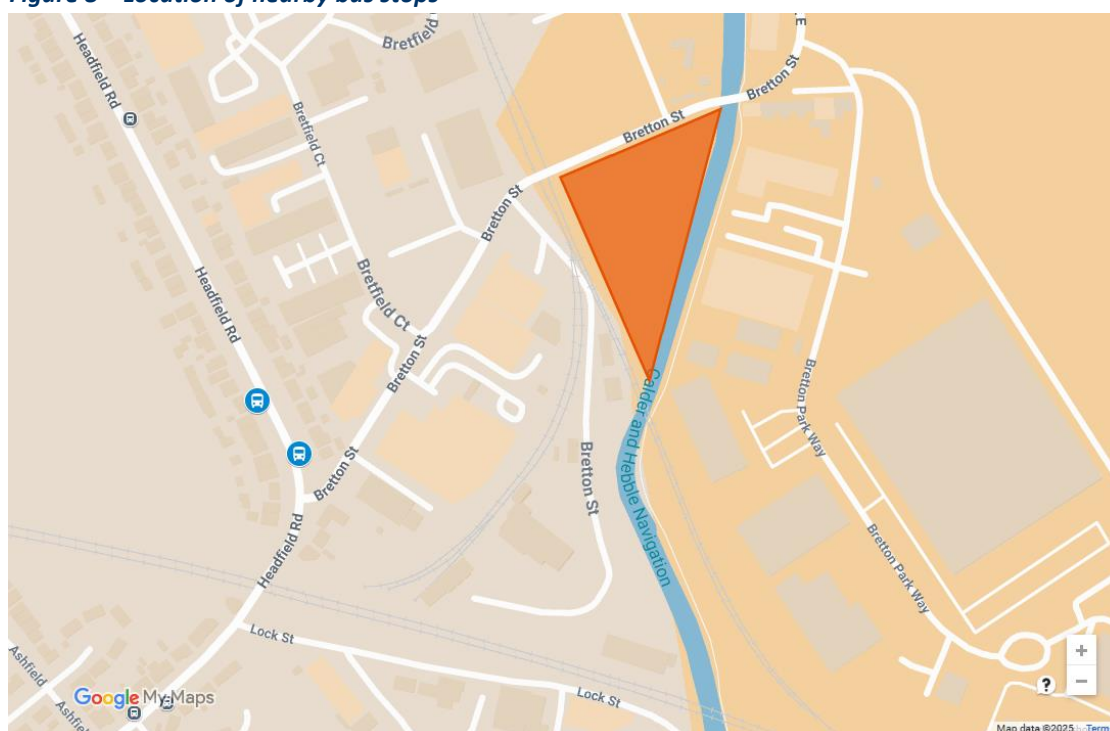


5.3.6 Access to the National Cycle Network (NCN) Route 69 can be made off Savile Road to the north of the site, approximately 1500m away. Local roads are generally seen as appropriate for road cycling.

#### 5.4 Accessibility by Bus

5.4.1 The nearest bus stops to the site are located on Headfield Road to the west, within 445m of the site. The locations of these nearby bus stops are shown on **Figure 8**, and an overview of each bus stop is given in **Table 2**.

**Figure 8 – Location of nearby bus stops**



**Table 2 – Nearby bus stop information**

Bus Stop Location	Bus Stop Information		
Headfield Road Bretton Street, opp.	Reference	→	45015276
	Direction of travel	→	North-west
	Distance from site	→	Approx. 455m walking distance
	Facilities	→	Pole with flag and service information
	Services	→	230A
Headfield Road Bretton Street, adj.	Reference	→	45015275
	Direction of travel	→	South
	Distance from site	→	Approx. 415m walking distance
	Facilities	→	Pole with flag and service information
	Services	→	230A

5.4.2 A summary of the service available from the nearby bus stops is given in **Table 3**.

**Table 3 – Summary of bus service available from nearby bus stops**

Number	Route	Approximate Peak Frequency		
		Mon – Sat Daytime	Mon – Sat Evening	Sunday
230A	Dewsbury – Grange Moor	60 mins	No service	No service

5.4.3 The site is served by an hourly service between Dewsbury and Grange Moor. The service provides a bus connection to Dewsbury Bus Station where connecting travel is possible.

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## **5.5 Accessibility by Rail**

- 5.5.1 The closest train station is Dewsbury railway station, which is located an approximate 2300m walking distance from the site.
- 5.5.2 Dewsbury railway station has step-free access onto both platforms and accessible ticket machines. Staff are present between 06:30 – 19:45 on weekdays and Saturdays, and between 07:00 – 19:45 on Sundays. Outside of staffed hours, a 24-hour helpline is available.
- 5.5.3 A secure cycle storage hub and cycle racks are available at the station, providing a total of 70 sheltered cycle spaces. CCTV is also present for additional security.
- 5.5.4 Dewsbury railway station is served by 4 trains per hour to Leeds, 2 trains per hour to Huddersfield and an hourly train to Halifax.

## **5.6 Accessibility Summary**

- 5.6.1 In summary, it is considered that the site is accessible by both active and public transport, providing customers and staff with the opportunity to travel by sustainable modes and reducing reliance on the private car.

## 6. Traffic Impact Assessment

### 6.1 Multi-modal trips

6.1.1 This section estimates the multi-modal trip rates and potential level of person trip generation by all modes of travel together with vehicular trips resulting from the development proposals, indicating the level of demand from each type of traveller. The assessment covers a weekday.

6.1.2 Information contained in the TRICS database (v7.11.4), has been used to assess the potential multi-modal trips that the proposed development could generate. The trip rates are based on the industrial unit use category which is considered to be higher than a warehouse type use. The search parameters used to filter surveys are shown in **Table 4**.

**Table 4 – TRICS selection criteria (multi-modal)**

Land Use	Trip Rate Selection Criteria
Employment	<ul style="list-style-type: none"> <li>→ Land Use Category: 'Employment – Industrial Unit';</li> <li>→ Multi modal trip rate surveys;</li> <li>→ Gross Floor Area range: 3513 to 17834 (units: sqm);</li> <li>→ The regions of Greater London and Ireland were excluded;</li> <li>→ Saturday and Sunday surveys were excluded; and,</li> <li>→ Town Centre and Free Standing area sites were excluded.</li> </ul>

6.1.3 The resultant multi-modal traffic generation for the proposed development is shown in **Table 5**. A fully copy of the TRICS outputs is included in **Appendix E**

**Table 5 – Predicted total trips by travel mode (2510 sqm)**

Time Period	Mode of Travel	Trip Rate	Modal Split	Generations
AM Peak 08:00-09:00	Pedestrians	0.017	6.16%	0.4
	Cyclists	0.004	1.45%	0.1
	Public Transport Users	0.034	12.32%	0.9
	Vehicle Occupants	0.221	80.07%	5.5
	Total People Trips	0.262	100.00%	7
PM Peak 17:00-18:00	Pedestrians	0.055	10.02%	1.4
	Cyclists	0.019	3.46%	0.5
	Public Transport Users	0.234	42.62%	5.9
	Vehicle Occupants	0.241	43.90%	6.0
	Total People Trips	0.549	100.00%	14
Daily	Pedestrians	0.313	5.03%	8
	Cyclists	0.11	1.77%	3
	Public Transport Users	2.143	34.45%	54
	Vehicle Occupants	3.657	58.79%	92
	Total People Trips	6.22	100.00%	156

- 6.1.4 Based on the assessed TRICS data, approximately 59% of visitors to the development are predicted to be Vehicle Occupants (80.07% in the AM peak, 43.9% in the PM peak and 58.8% throughout the day), while approximately 5% of visitors (6.2% in the AM peak, 10% in the PM peak and 5% throughout the day) are expected to be pedestrians.
- 6.1.5 People trip generations are predicted to be low with 7 people trips during the AM peak, 14 people trips during the PM peak and 156 people trips throughout the day.
- 6.1.6 Generations from cyclists and public transport users are predicted to be low.

## 6.2 Vehicular Trips

- 6.2.1 The vehicular trip generations from the proposed development are summarised in **Table 6** below. The full TRICS report can be found at **Appendix E**.

**Table 6 – Predicted Vehicular Trip Rates and Resultant Trips – Industrial Unit**

Time Period	Trip Rates		Generations		
	Arrivals	Departures	Arrivals	Departures	Total
AM Peak 06:00-07:00*	0.214	0.148	5	4	9
AM Peak 08:00-09:00	0.150	0.036	4	1	5
PM Peak 16:00-17:00	0.023	0.167	1	4	5
PM Peak 17:00-18:00	0.106	0.099	3	2	5

\*Busiest TRICS peak period

- 6.2.2 Based on the above table it can be seen that the proposed development would result in 9 vehicle movements (two way) in the development AM peak (based on busiest TRICS period) and 5 vehicle movements in the development and highway PM peak periods. Which equates to approximately 1 vehicle every 6.7 minutes in the development AM peak and approximately 1 vehicle every 12 minutes in the PM peak periods. It is considered that vehicular trips would not be material and would be seen against daily fluctuations in traffic flows.

---

## 7. Summary and Conclusions

- 7.1 Sanderson Associates Consulting Engineers has been appointed by A & K Properties to prepare a Transport Statement in support of development proposals relating to a single industrial / warehouse unit on a plot of land to the south of Bretton Street, Dewsbury WF12 9BS.
- 7.2 The proposed development is considered to have no material impact on highway safety and following accident analysis for the most recent 5-year period, it has been concluded that there are no specific areas of concern which would necessitate intervention or improvement as a result of the proposals.
- 7.3 The site is within a 2000m walking distance of Dewsbury town centre and the southern part of Dewsbury making walking a suitable option for those living in those areas. Footways, street lighting and crossing points with dropped kerbs are present in the vicinity of the site to aid pedestrian travel.
- 7.4 The residential areas of Dewsbury, Ossett, Batley, Thornhill, Mirfield and Heckmondwike are all within an 8km cycling catchment of the site, along with western areas of Wakefield such as Horbury and Lupset.
- 7.5 The nearest bus stop to the site is located on Headfield Road within 445m of the site access. Dewsbury railway station is located approximate 2300m walking distance from the site. Public transport services (bus) connect to areas in between Dewsbury and Grange Moor.
- 7.6 The traffic impact assessment predicts that the proposed development will give rise to minimal vehicle trips which are not expected to be noticeable against regular fluctuations in traffic along Bretton Street.
- 7.7 As such this Transport Statement has demonstrated that the development will not have an unacceptable impact on highway safety and that the residual cumulative impacts of the development on any mode of transport are not severe in transport terms, consequently, the planning application should be supported on transport grounds in accordance with National Planning Policy Framework.



---

## Appendix A

### Crashmap Pro Report



# Crash Report

## Area of Interest (AOI) Information

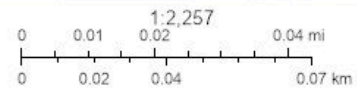
Area : 6,505.12 m<sup>2</sup>

Mar 13 2025 15:03:40 Greenwich Mean Time



### Crashes

- Slight
- Serious



Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community, Sources: Esri, Maxar, Airbus DS, USGS, NOAA, NASA, CGAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyreisen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap, and the GIS user community

## Summary

Name	Count	Area(m <sup>2</sup> )	Length(m)
Crashes	3	N/A	N/A

## Crashes

#	Carriageway_Hazards	Severity	Officer_Attended	Accident_DateTime	Year
1	None	Slight	Police officer attended crash scene	February 13, 2019	2019
2	None	Serious	Police officer attended crash scene	November 14, 2020	2020
3	None	Serious	Police officer attended crash scene	September 26, 2019	2019

#	Number_of_vehicles	Number_of_casualties	Easting	Northing	Highway_Authority
1	2	1	425116	420354	Kirklees
2	1	2	425120	420352	Kirklees
3	2	1	425116	420353	Kirklees

#	Road_Number	Weather_conditions	Road_Type	Road_surface	Speed_Limit
1	U	Fine without high winds	Single carriageway	Dry	30
2	U	Fine without high winds	Single carriageway	Dry	30
3	U	Fine without high winds	Single carriageway	Dry	30

#	Light_conditions	Junction_detail	Pedestrian_Crossing	Involved_pedalcycle	Involved_Motorcycle
1	Daylight: regardless of presence of streetlights	T or staggered junction	No physical crossing facility within 50 metres	0	0
2	Darkness: street lights present and lit	Not at or within 20 metres of junction	No physical crossing facility within 50 metres	0	0
3	Daylight: regardless of presence of streetlights	T or staggered junction	No physical crossing facility within 50 metres	0	1

#	Pedestrian_casualty	Child_casualty	Pedal_cycleuser_casualty	Motorcycle_user_casualty	Involved_car
1	0	0	0	0	1
2	0	0	0	0	1
3	0	0	0	1	0

#	Involved_goodsvehicle	Involved_Bus	Involved_young_driver	Local_Authority_District	Junction_control
1	0	0	0	Kirklees	Give way or uncontrolled
2	0	0	0	Kirklees	Unknown
3	1	0	1	Kirklees	Give way or uncontrolled

#	Is_Provisional	Is_Amended	Web_Link	Count
1	N	No	<a href="https://www.crashmap.co.uk/reports/proreportservice?reportId=20191362D0325">https://www.crashmap.co.uk/reports/proreportservice?reportId=20191362D0325</a>	1
2	N	No	<a href="https://www.crashmap.co.uk/reports/proreportservice?reportId=2020137BE1831">https://www.crashmap.co.uk/reports/proreportservice?reportId=2020137BE1831</a>	1
3	N	No	<a href="https://www.crashmap.co.uk/reports/proreportservice?reportId=20191369Q1287">https://www.crashmap.co.uk/reports/proreportservice?reportId=20191369Q1287</a>	1





---

## Appendix B

### Full Speed Survey Results



### SPEED SURVEY

Location Bretton Street, Dewsbury, WF12 9BS  
 Direction of Travel Eastbound  
 Direction of Visibility To Left

Project Number 165905  
 Date of Survey 13/03/25  
 Start Time 09:50  
 Finish Time 11:40

Speed	No. of Readings	Speed	No. of Readings	Speed	No. of Readings	Speed	No. of Readings
1		26	4	51		76	
2		27	4	52		77	
3		28	1	53		78	
4		29	2	54		79	
5		30	2	55		80	
6		31	1	56		81	
7		32		57		82	
8		33		58		83	
9		34		59		84	
10		35		60		85	
11		36		61		86	
12		37		62		87	
13		38		63		88	
14		39		64		89	
15		40		65		90	
16	1	41		66		91	
17	1	42		67		92	
18	3	43		68		93	
19	6	44		69		94	
20	7	45		70		95	
21	13	46		71		96	
22	20	47		72		97	
23	14	48		73		98	
24	14	49		74		99	
25	7	50		75		100	

Number of Readings = 100 Dual C'way Y/N? n

Mean Speed = 22.76 Single C'way Y/N? y

Standard Deviation = 2.8181232 Wet Road Surface Y/N? n

85th %ile Wet Weather Speed = 25.682394

85th %ile Speed = 23.197394 <<<<

**Note:** Insert Y or N in boxes against carriageway type and road surface condition and then use 85 percentile speed as marked with <<<<.



### SPEED SURVEY

Location Bretton Street, Dewsbury, WF12 9BS  
 Direction of Travel Westbound  
 Direction of Visibility To Right

Project Number 165905  
 Date of Survey 13/03/25  
 Start Time 09:50  
 Finish Time 11:40

Speed	No. of Readings	Speed	No. of Readings	Speed	No. of Readings	Speed	No. of Readings
1		26	2	51		76	
2		27	3	52		77	
3		28	2	53		78	
4		29		54		79	
5		30	2	55		80	
6		31		56		81	
7		32		57		82	
8		33		58		83	
9		34		59		84	
10		35		60		85	
11		36		61		86	
12		37		62		87	
13		38		63		88	
14		39		64		89	
15		40		65		90	
16		41		66		91	
17	5	42		67		92	
18	2	43		68		93	
19	8	44		69		94	
20	5	45		70		95	
21	18	46		71		96	
22	18	47		72		97	
23	16	48		73		98	
24	15	49		74		99	
25	4	50		75		100	

Number of Readings = 100      Dual C'way Y/N? y

Mean Speed = 22.24      Single C'way Y/N? n

Standard Deviation = 2.6212804      Wet Road Surface Y/N? n

85th %ile Wet Weather Speed = 24.958268

85th %ile Speed = 22.473268 <<<<

**Note:** Insert Y or N in boxes against carriageway type and road surface condition and then use 85 percentile speed as marked with <<<<.

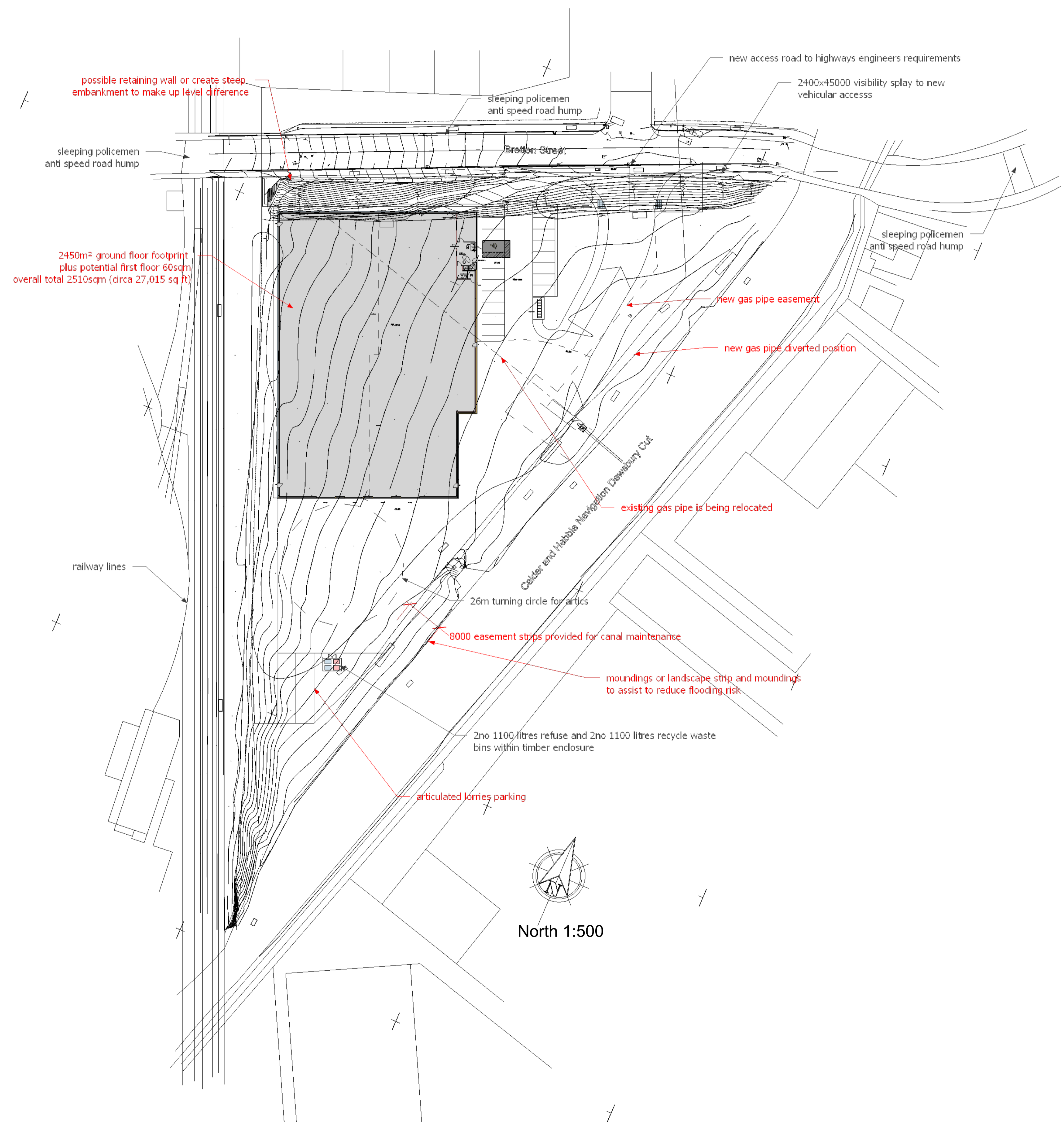


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## Appendix C

Proposed Site Plan Drawing 102

Proposed Ground Floor Plan drawing 104



2450m<sup>2</sup> ground floor footprint  
plus potential first floor 60sqm  
overall total 2510sqm (circa 27,015 sq ft)

Revisions  
A 28-3-2025  
site access entrance radii updated to highway requirements.

**Jade3 Architecture Ltd**  
Jade3 Architecture Ltd, Studio 114, Westbourne Road, Huddersfield HD1 4LF  
Telephone: 07531 740097 www.jade3architecture.co.uk

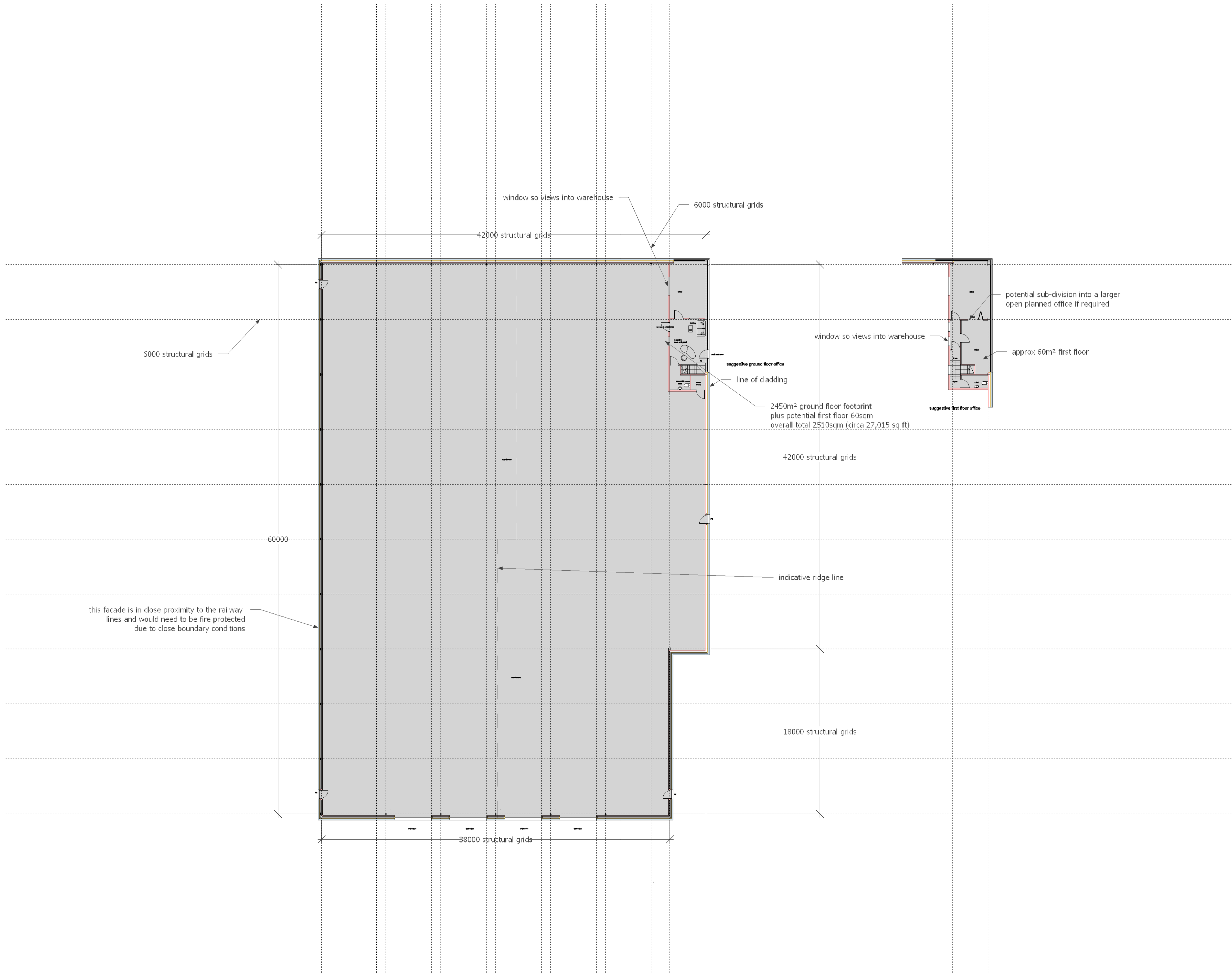
bretton Street  
dewsbury

Project No: 2024  
Enquiry 51  
Project Title: proposed site location (overlaid onto with survey contours)  
Reviewed By: MC  
Scale: 1:500 @A1 size  
Date: 7/1/2025

Drawn No: 102  
Reviewed Title:  
Revision: A

**Important Notice**  
Do not scale off this drawing. Critical dimensions should be checked on site prior to works commencing. Dimensional conflicts should be brought to the company's attention as soon as they become apparent. Advice to be sought under the contract made for sub-contractors. Copyright in this drawing and any work executed from this drawing remains the property of Jade3 Architecture Ltd.

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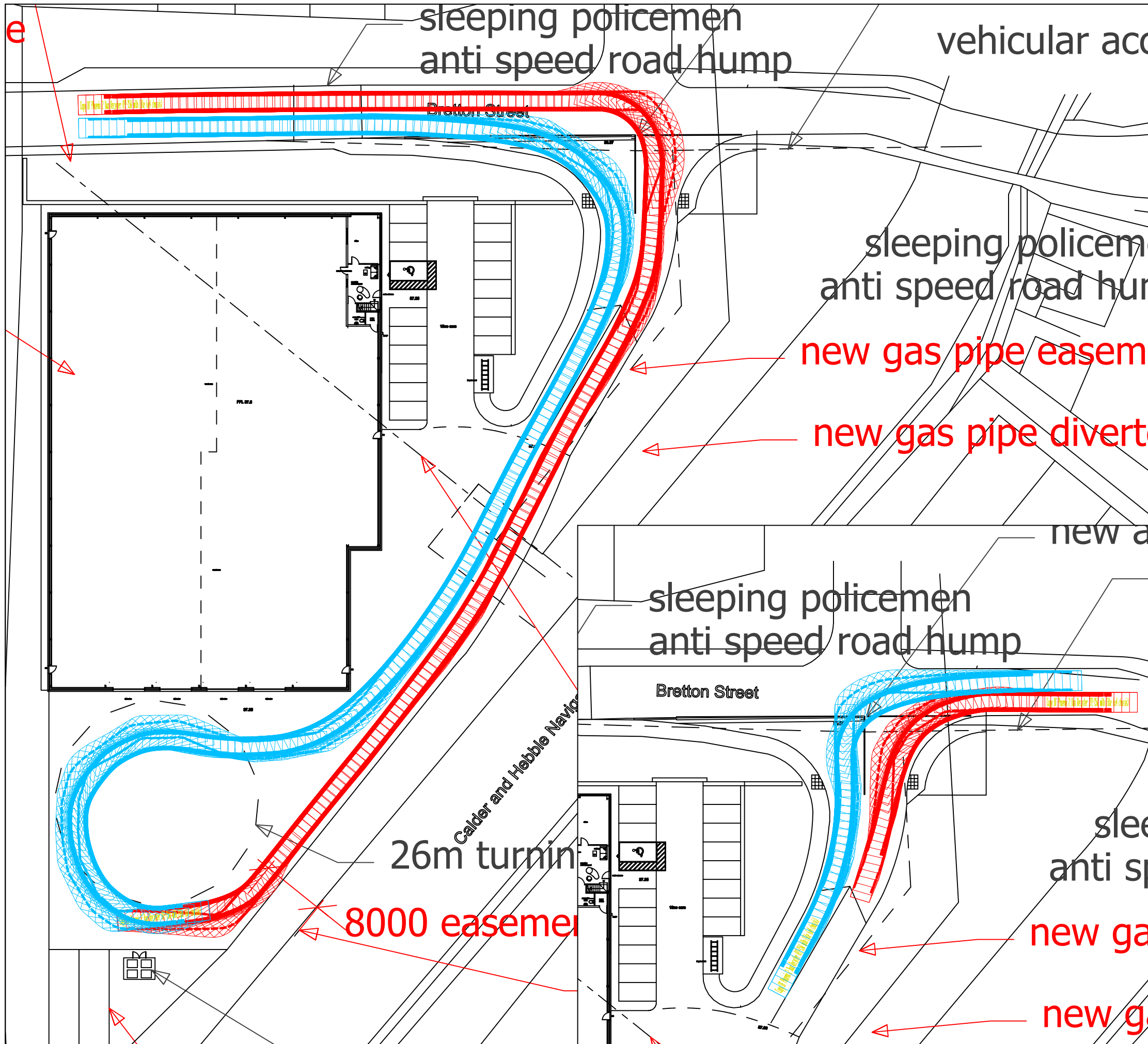




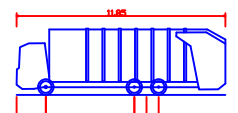
---

## Appendix D

**Drawing 165629-001 – Vehicle Swept Path Analysis for Refuse Vehicle**  
**Drawing 165629-002 - Vehicle Swept Path Analysis for 16.5m articulated Vehicle**



- Sanderson Associates Consulting Engineers ("the consultant"), has not checked or verified, and shall have no liability whatsoever for any inaccuracies which may be attributable to any data, reports, base plan(s) and drawings provided by the client, or purchased by the consultant on the client's behalf, that may have been utilised within this drawing.
- The consultant shall not be liable for the use by any person of any document for any purpose other than that for which the same were provided by the consultant.
- No liability whatsoever is accepted by the consultant for any error or omissions.
- The consultant accepts no liability for any vehicle specification errors within the vehicle track software used and / or its vehicle libraries.



Copy of Phoenix 2 Duo Recycler (P2-15W with Elite 6x4 chassis)  
 Overall Length 11.850m  
 Overall Width 3.250m  
 Overall Body Height 3.750m  
 Min. Body Ground Clearance 0.300m  
 Track Width 2.500m  
 Lock to lock time 4.100s  
 Wall to Wall Turning Radius 11.035m

Rev	Amendment	Drawn	Date	Checked

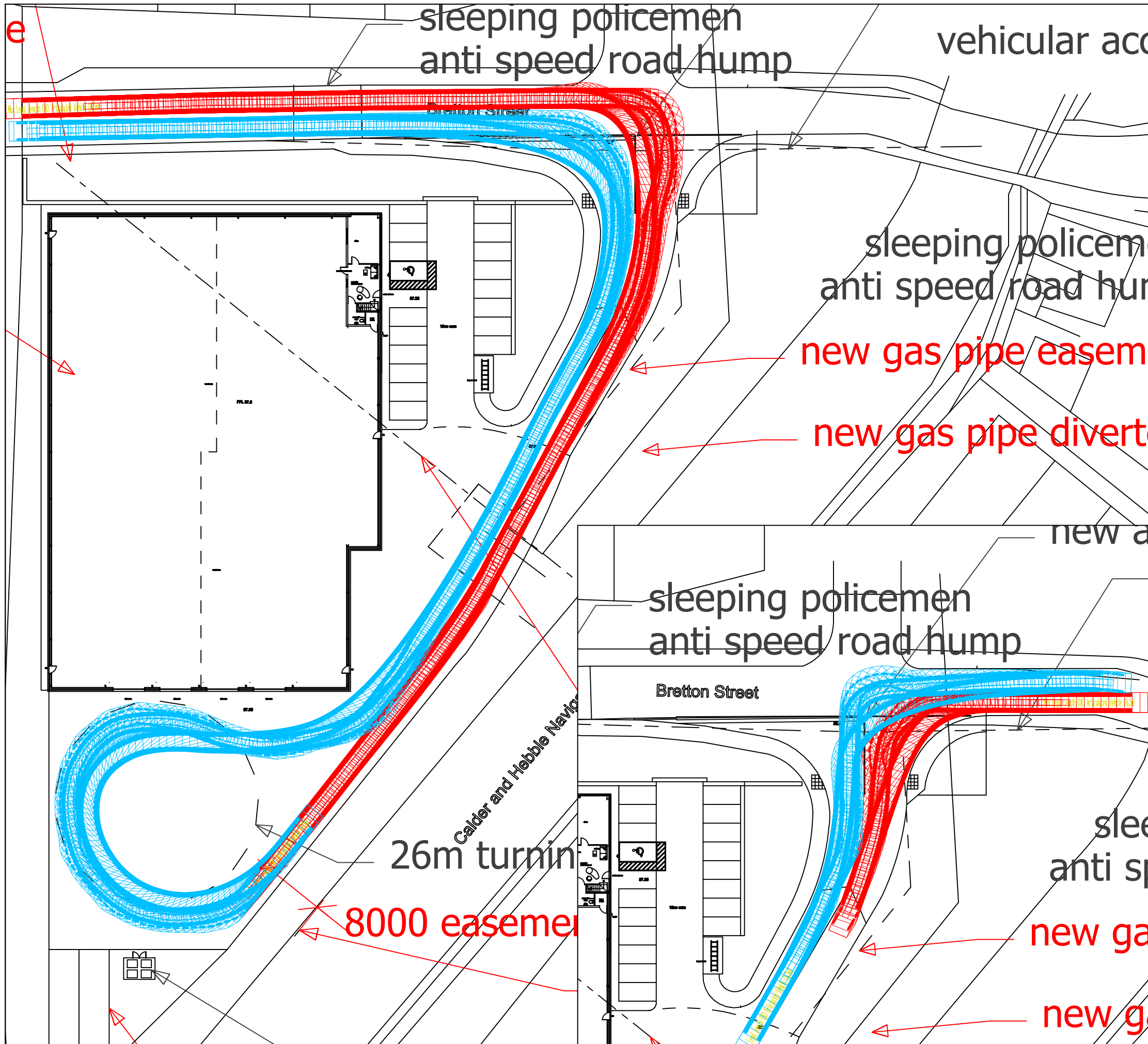
**sanderson**  
 associates  
 consulting engineers  
 Highways | Traffic | Transportation | Water  
 T 01924 844080 mail@sandersonassociates.co.uk  
 www.sandersonassociates.co.uk

Project Name  
**Bretton Street  
 Dewsbury, WF12 9BS**

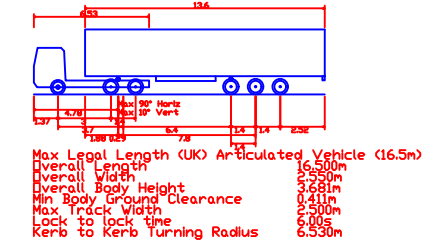
Drawing Title  
**Vehicle Swept Path Analysis  
 for Refuse Vehicle**

Scale 1:500	Drawn By BC
Drawing Size A3	Checked By DC
Date March 2025	Approved By DC

Drawing Number 165905-001	Rev
------------------------------	-----



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- The consultant shall not be liable for the use by any person of any document for any purpose other than that for which the same were provided by the consultant.
- No liability whatsoever is accepted by the consultant for any error or omissions.
- The consultant accepts no liability for any vehicle specification errors within the vehicle track software used and / or its vehicle libraries.



Rev	Amendment	Drawn	Date	Checked


**sanderson**  
 associates  
 consulting engineers  
 Highways | Traffic | Transportation | Water  
 T 01924 844080 mail@sandersonassociates.co.uk  
 www.sandersonassociates.co.uk

Project Name  
**Bretton Street**  
**Dewsbury, WF12 9BS**

Drawing Title  
**Vehicle Swept Path Analysis**  
**for 16.5m Articulated Vehicle**

Scale 1:500	Drawn By BC
Drawing Size A3	Checked By DC
Date March 2025	Approved By DC

Drawing Number	Rev
165905-002	



---

## Appendix E

TRICS Report

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT  
Category : C - INDUSTRIAL UNIT  
MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

02	SOUTH EAST	
	HC HAMPSHIRE	1 days
	HF HERTFORDSHIRE	1 days
03	SOUTH WEST	
	DV DEVON	1 days
06	WEST MIDLANDS	
	WK WARWICKSHIRE	1 days
10	WALES	
	CF CARDIFF	1 days

*This section displays the number of survey days per TRICS® sub-region in the selected set*

## Primary Filtering selection:

*This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.*

Parameter: Gross floor area  
Actual Range: 3513 to 17834 (units: sqm)  
Range Selected by User: 2000 to 20000 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/13 to 08/11/23

*This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.*

Selected survey days:

Wednesday 3 days  
Thursday 2 days

*This data displays the number of selected surveys by day of the week.*

Selected survey types:

Manual count 5 days  
Directional ATC Count 0 days

*This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaken using machines.*

Selected Locations:

Suburban Area (PPS6 Out of Centre) 2  
Edge of Town 2  
Neighbourhood Centre (PPS6 Local Centre) 1

*This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.*

Selected Location Sub Categories:

Industrial Zone 4  
Village 1

*This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.*

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included 4 days - Selected  
Servicing vehicles Excluded 1 days - Selected

## Secondary Filtering selection:

Use Class:

Not Known 5 days

*This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 has been used for this purpose, which can be found within the Library module of TRICS®.*

Filter by Site Operations Breakdown:

All Surveys Included

Population within 500m Range:

All Surveys Included

Secondary Filtering selection (Cont.):

Population within 1 mile:

1,000 or Less	1 days
5,001 to 10,000	1 days
15,001 to 20,000	2 days
25,001 to 50,000	1 days

*This data displays the number of selected surveys within stated 1-mile radii of population.*

Population within 5 miles:

25,001 to 50,000	1 days
75,001 to 100,000	1 days
125,001 to 250,000	2 days
250,001 to 500,000	1 days

*This data displays the number of selected surveys within stated 5-mile radii of population.*

Car ownership within 5 miles:

0.6 to 1.0	2 days
1.1 to 1.5	2 days
1.6 to 2.0	1 days

*This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.*

Travel Plan:

No	5 days
----	--------

*This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.*

PTAL Rating:

No PTAL Present	5 days
-----------------	--------

*This data displays the number of selected surveys with PTAL Ratings.*

LIST OF SITES relevant to selection parameters

1	CF-02-C-02 MAES-Y-COED ROAD CARDIFF	BAKERY	CARDIFF
	Suburban Area (PPS6 Out of Centre) Industrial Zone Total Gross floor area: 14125 sqm <i>Survey date: THURSDAY 06/10/16</i>		
	<i>Survey Type: MANUAL</i>		
2	DV-02-C-02 GRACE ROAD SOUTH EXETER	ENERGY RECOVERY FACILITY	DEVON
	MARSH BARTON TRAD. EST. Suburban Area (PPS6 Out of Centre) Industrial Zone Total Gross floor area: 3513 sqm <i>Survey date: THURSDAY 06/07/17</i>		
	<i>Survey Type: MANUAL</i>		
3	HC-02-C-02 LONDON ROAD LAVERSTOKE	GIN DISTILLERY	HAMPSHIRE
	Neighbourhood Centre (PPS6 Local Centre) Village Total Gross floor area: 8000 sqm <i>Survey date: WEDNESDAY 09/05/18</i>		
	<i>Survey Type: MANUAL</i>		
4	HF-02-C-02 COCKERELL CLOSE STEVENAGE	FRESH PRODUCE	HERTFORDSHIRE
	Edge of Town Industrial Zone Total Gross floor area: 17834 sqm <i>Survey date: WEDNESDAY 08/11/23</i>		
	<i>Survey Type: MANUAL</i>		
5	WK-02-C-01 CASTLE MOUND WAY RUGBY	MACHINE ENGINEERING	WARWICKSHIRE
	Edge of Town Industrial Zone Total Gross floor area: 9216 sqm <i>Survey date: WEDNESDAY 10/11/21</i>		
	<i>Survey Type: MANUAL</i>		

*This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.*

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT

MULTI-MODAL TOTAL VEHICLES

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Total People to Total Vehicles ratio (all time periods and directions): 2.21

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	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	2	13525	0.078	2	13525	0.007	2	13525	0.085
06:00 - 07:00	2	13525	0.214	2	13525	0.148	2	13525	0.362
07:00 - 08:00	5	10538	0.173	5	10538	0.032	5	10538	0.205
08:00 - 09:00	5	10538	0.150	5	10538	0.036	5	10538	0.186
09:00 - 10:00	5	10538	0.137	5	10538	0.068	5	10538	0.205
10:00 - 11:00	5	10538	0.142	5	10538	0.065	5	10538	0.207
11:00 - 12:00	5	10538	0.057	5	10538	0.074	5	10538	0.131
12:00 - 13:00	5	10538	0.101	5	10538	0.125	5	10538	0.226
13:00 - 14:00	5	10538	0.076	5	10538	0.131	5	10538	0.207
14:00 - 15:00	5	10538	0.063	5	10538	0.074	5	10538	0.137
15:00 - 16:00	5	10538	0.040	5	10538	0.129	5	10538	0.169
16:00 - 17:00	5	10538	0.023	5	10538	0.167	5	10538	0.190
17:00 - 18:00	5	10538	0.106	5	10538	0.099	5	10538	0.205
18:00 - 19:00	5	10538	0.089	5	10538	0.118	5	10538	0.207
19:00 - 20:00	3	11683	0.006	3	11683	0.029	3	11683	0.035
20:00 - 21:00	3	11683	0.003	3	11683	0.049	3	11683	0.052
21:00 - 22:00	1	8000	0.000	1	8000	0.000	1	8000	0.000
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			1.458			1.351			2.809

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is:  $COUNT/TRP*FACT$ . Trip rates are then rounded to 3 decimal places.

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#### Parameter summary

Trip rate parameter range selected:	3513 - 17834 (units: sqm)
Survey date range:	01/01/13 - 08/11/23
Number of weekdays (Monday-Friday):	5
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

*This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.*

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT

MULTI-MODAL OGVS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	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	2	13525	0.004	2	13525	0.000	2	13525	0.004
06:00 - 07:00	2	13525	0.004	2	13525	0.007	2	13525	0.011
07:00 - 08:00	5	10538	0.023	5	10538	0.011	5	10538	0.034
08:00 - 09:00	5	10538	0.025	5	10538	0.019	5	10538	0.044
09:00 - 10:00	5	10538	0.049	5	10538	0.023	5	10538	0.072
10:00 - 11:00	5	10538	0.040	5	10538	0.008	5	10538	0.048
11:00 - 12:00	5	10538	0.023	5	10538	0.019	5	10538	0.042
12:00 - 13:00	5	10538	0.046	5	10538	0.036	5	10538	0.082
13:00 - 14:00	5	10538	0.025	5	10538	0.019	5	10538	0.044
14:00 - 15:00	5	10538	0.009	5	10538	0.013	5	10538	0.022
15:00 - 16:00	5	10538	0.011	5	10538	0.015	5	10538	0.026
16:00 - 17:00	5	10538	0.008	5	10538	0.011	5	10538	0.019
17:00 - 18:00	5	10538	0.002	5	10538	0.000	5	10538	0.002
18:00 - 19:00	5	10538	0.000	5	10538	0.000	5	10538	0.000
19:00 - 20:00	3	11683	0.003	3	11683	0.000	3	11683	0.003
20:00 - 21:00	3	11683	0.000	3	11683	0.003	3	11683	0.003
21:00 - 22:00	1	8000	0.000	1	8000	0.000	1	8000	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.272			0.184			0.456

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is:  $COUNT/TRP*FACT$ . Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT

MULTI-MODAL CYCLISTS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	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	2	13525	0.000	2	13525	0.000	2	13525	0.000
06:00 - 07:00	2	13525	0.022	2	13525	0.004	2	13525	0.026
07:00 - 08:00	5	10538	0.004	5	10538	0.006	5	10538	0.010
08:00 - 09:00	5	10538	0.004	5	10538	0.000	5	10538	0.004
09:00 - 10:00	5	10538	0.002	5	10538	0.000	5	10538	0.002
10:00 - 11:00	5	10538	0.000	5	10538	0.002	5	10538	0.002
11:00 - 12:00	5	10538	0.002	5	10538	0.000	5	10538	0.002
12:00 - 13:00	5	10538	0.000	5	10538	0.000	5	10538	0.000
13:00 - 14:00	5	10538	0.006	5	10538	0.000	5	10538	0.006
14:00 - 15:00	5	10538	0.000	5	10538	0.006	5	10538	0.006
15:00 - 16:00	5	10538	0.000	5	10538	0.004	5	10538	0.004
16:00 - 17:00	5	10538	0.000	5	10538	0.004	5	10538	0.004
17:00 - 18:00	5	10538	0.011	5	10538	0.008	5	10538	0.019
18:00 - 19:00	5	10538	0.013	5	10538	0.006	5	10538	0.019
19:00 - 20:00	3	11683	0.000	3	11683	0.006	3	11683	0.006
20:00 - 21:00	3	11683	0.000	3	11683	0.000	3	11683	0.000
21:00 - 22:00	1	8000	0.000	1	8000	0.000	1	8000	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.064			0.046			0.110

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is:  $COUNT/TRP*FACT$ . Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT

MULTI-MODAL VEHICLE OCCUPANTS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	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	2	13525	0.074	2	13525	0.007	2	13525	0.081
06:00 - 07:00	2	13525	0.288	2	13525	0.174	2	13525	0.462
07:00 - 08:00	5	10538	0.177	5	10538	0.044	5	10538	0.221
08:00 - 09:00	5	10538	0.171	5	10538	0.036	5	10538	0.207
09:00 - 10:00	5	10538	0.182	5	10538	0.082	5	10538	0.264
10:00 - 11:00	5	10538	0.203	5	10538	0.063	5	10538	0.266
11:00 - 12:00	5	10538	0.085	5	10538	0.085	5	10538	0.170
12:00 - 13:00	5	10538	0.148	5	10538	0.186	5	10538	0.334
13:00 - 14:00	5	10538	0.106	5	10538	0.207	5	10538	0.313
14:00 - 15:00	5	10538	0.091	5	10538	0.099	5	10538	0.190
15:00 - 16:00	5	10538	0.053	5	10538	0.178	5	10538	0.231
16:00 - 17:00	5	10538	0.032	5	10538	0.214	5	10538	0.246
17:00 - 18:00	5	10538	0.125	5	10538	0.116	5	10538	0.241
18:00 - 19:00	5	10538	0.123	5	10538	0.167	5	10538	0.290
19:00 - 20:00	3	11683	0.009	3	11683	0.046	3	11683	0.055
20:00 - 21:00	3	11683	0.003	3	11683	0.083	3	11683	0.086
21:00 - 22:00	1	8000	0.000	1	8000	0.000	1	8000	0.000
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			1.870			1.787			3.657

*This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.*

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP\*FACT. Trip rates are then rounded to 3 decimal places.*

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT  
 MULTI-MODAL PEDESTRIANS  
 Calculation factor: 100 sqm  
 BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	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	2	13525	0.000	2	13525	0.000	2	13525	0.000
06:00 - 07:00	2	13525	0.000	2	13525	0.000	2	13525	0.000
07:00 - 08:00	5	10538	0.015	5	10538	0.006	5	10538	0.021
08:00 - 09:00	5	10538	0.011	5	10538	0.006	5	10538	0.017
09:00 - 10:00	5	10538	0.008	5	10538	0.006	5	10538	0.014
10:00 - 11:00	5	10538	0.011	5	10538	0.011	5	10538	0.022
11:00 - 12:00	5	10538	0.009	5	10538	0.009	5	10538	0.018
12:00 - 13:00	5	10538	0.011	5	10538	0.009	5	10538	0.020
13:00 - 14:00	5	10538	0.017	5	10538	0.019	5	10538	0.036
14:00 - 15:00	5	10538	0.011	5	10538	0.011	5	10538	0.022
15:00 - 16:00	5	10538	0.013	5	10538	0.013	5	10538	0.026
16:00 - 17:00	5	10538	0.019	5	10538	0.015	5	10538	0.034
17:00 - 18:00	5	10538	0.032	5	10538	0.023	5	10538	0.055
18:00 - 19:00	5	10538	0.017	5	10538	0.011	5	10538	0.028
19:00 - 20:00	3	11683	0.000	3	11683	0.000	3	11683	0.000
20:00 - 21:00	3	11683	0.000	3	11683	0.000	3	11683	0.000
21:00 - 22:00	1	8000	0.000	1	8000	0.000	1	8000	0.000
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			0.174			0.139			0.313

*This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.*

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP\*FACT. Trip rates are then rounded to 3 decimal places.*

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT  
 MULTI-MODAL PUBLIC TRANSPORT USERS  
 Calculation factor: 100 sqm  
 BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	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	2	13525	0.004	2	13525	0.000	2	13525	0.004
06:00 - 07:00	2	13525	0.089	2	13525	0.078	2	13525	0.167
07:00 - 08:00	5	10538	0.019	5	10538	0.006	5	10538	0.025
08:00 - 09:00	5	10538	0.034	5	10538	0.000	5	10538	0.034
09:00 - 10:00	5	10538	0.061	5	10538	0.002	5	10538	0.063
10:00 - 11:00	5	10538	0.080	5	10538	0.066	5	10538	0.146
11:00 - 12:00	5	10538	0.106	5	10538	0.013	5	10538	0.119
12:00 - 13:00	5	10538	0.085	5	10538	0.078	5	10538	0.163
13:00 - 14:00	5	10538	0.059	5	10538	0.055	5	10538	0.114
14:00 - 15:00	5	10538	0.011	5	10538	0.135	5	10538	0.146
15:00 - 16:00	5	10538	0.131	5	10538	0.063	5	10538	0.194
16:00 - 17:00	5	10538	0.013	5	10538	0.078	5	10538	0.091
17:00 - 18:00	5	10538	0.133	5	10538	0.101	5	10538	0.234
18:00 - 19:00	5	10538	0.133	5	10538	0.082	5	10538	0.215
19:00 - 20:00	3	11683	0.060	3	11683	0.143	3	11683	0.203
20:00 - 21:00	3	11683	0.009	3	11683	0.203	3	11683	0.212
21:00 - 22:00	1	8000	0.013	1	8000	0.000	1	8000	0.013
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			1.040			1.103			2.143

*This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.*

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP\*FACT. Trip rates are then rounded to 3 decimal places.*

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT

MULTI-MODAL TOTAL PEOPLE

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Total People to Total Vehicles ratio (all time periods and directions): 2.21

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	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	2	13525	0.078	2	13525	0.007	2	13525	0.085
06:00 - 07:00	2	13525	0.399	2	13525	0.255	2	13525	0.654
07:00 - 08:00	5	10538	0.214	5	10538	0.061	5	10538	0.275
08:00 - 09:00	5	10538	0.220	5	10538	0.042	5	10538	0.262
09:00 - 10:00	5	10538	0.252	5	10538	0.089	5	10538	0.341
10:00 - 11:00	5	10538	0.294	5	10538	0.142	5	10538	0.436
11:00 - 12:00	5	10538	0.203	5	10538	0.108	5	10538	0.311
12:00 - 13:00	5	10538	0.245	5	10538	0.273	5	10538	0.518
13:00 - 14:00	5	10538	0.188	5	10538	0.281	5	10538	0.469
14:00 - 15:00	5	10538	0.114	5	10538	0.251	5	10538	0.365
15:00 - 16:00	5	10538	0.197	5	10538	0.258	5	10538	0.455
16:00 - 17:00	5	10538	0.065	5	10538	0.311	5	10538	0.376
17:00 - 18:00	5	10538	0.302	5	10538	0.247	5	10538	0.549
18:00 - 19:00	5	10538	0.287	5	10538	0.266	5	10538	0.553
19:00 - 20:00	3	11683	0.068	3	11683	0.194	3	11683	0.262
20:00 - 21:00	3	11683	0.011	3	11683	0.285	3	11683	0.296
21:00 - 22:00	1	8000	0.013	1	8000	0.000	1	8000	0.013
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			3.150			3.070			6.220

*This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.*

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP\*FACT. Trip rates are then rounded to 3 decimal places.*

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