Intended for
Potters-Ballotini Limited

Document type
Report

Date
March 2024

Transport Assessment

Stairfoot Glassworks, Wombwell Lane, Barnsley

RAMBOLL

Bright ideas.
Sustainable change.

Transport Assessment

Stairfoot Glassworks, Wombwell Lane, Barnsley

Project name	**Stairfoot Glassworks, Wombwell Lane, Barnsley**
Project no.	**1620015371-001**
Recipient	**Potters-Ballotini Ltd**
Document type	**Report**
Version	**3.0**
Date	**26/03/2024**
Prepared by	**Tom Craven**
Checked by	**Nicola Evans**
Approved by	**Johnny Ojeil**
Description	**Transport Assessment**

Ramboll
Arkwright House
Parsonage Gardens
Manchester M3 2LF
United Kingdom

T +44 161 827 1890
https://uk.ramboll.com

This report is produced by Ramboll at the request of the client for the purposes detailed herein. This report and accompanying documents are intended solely for the use and benefit of the client for this purpose only and may not be used by or disclosed to, in whole or in part, any other person without the express written consent of Ramboll. Ramboll neither owes nor accepts any duty to any third party and shall not be liable for any loss, damage or expense of whatsoever nature which is caused by their reliance on the information contained in this report.

Ramboll UK Limited
Registered in England & Wales
Company No: 03659970
Registered office:
240 Blackfriars Road
London
SE1 8NW

Contents

EXECUTIVE SUMMARY		3
1.	Introduction	4
1.1	Background	4
1.2	Pre-Application Consultation	4
1.3	Report Purpose and Structure	5
2.	Policy Review	6
2.1	National Planning Policy Framework	6
2.2	Barnsley, Doncaster and Rotherham Joint Waste Plan	7
2.3	Supplementary Planning Document: Sustainable Travel	8
2.4	Barnsley Borough Moving from A to B (Transport Strategy)	8
2.5	Supplementary Planning Document: Parking	9
3.	Baseline Conditions	11
3.1	Existing Site	11
3.2	Local Highway Network	11
3.3	Public Transport Accessibility	12
3.3.1	Bus Services	12
3.4	Rail Accessibility	13
3.5	Pedestrian and Cycle Accessibility	13
3.5.1	Pedestrian Accessibility	13
3.5.2	Cycle Accessibility	13
3.5.3	Public Rights of Way	14
3.6	Accident Analysis	14
3.7	Existing Operation	15
4.	Proposed Development	17
4.1	Development Proposals	17
4.2	Staff Numbers	17
4.3	Access	18
4.3.1	Vehicular Access	18
4.3.2	Pedestrian & Cycle Access	19
4.4	Parking	19
4.4.1	Car Parking	19
4.4.2	HGV Parking	20
4.4.3	Cycle Parking	20
4.5	Servicing and Deliveries	20
5.	Trip Generation	21
5.1	Operational Vehicle Trips	21
5.1.1	Staff Trips	22
5.1.2	Skip Truck Trips	22
5.1.3	Bulk Tipper Truck Trips	22
5.2	Construction Traffic	23

5.3	Trip Distribution	23
5.3.1	Staff Vehicles	23
5.3.2	Skip & Bulk Tipper Trucks	23
5.4	Final Development Trips	23
6.	Swept Path Analysis	25
6.1	16.5m Articulated HGV	25
6.2	12.5m Rigid HGV	25
6.3	Fire Tender	25
6.4	Refuse Vehicle	25
6.5	Car	25
7.	Policy Compliance	26
8.	Summary & Conclusion	28

Appendices

Appendix 1
Proposed site plan

Appendix 2
Junction Design Drawing

Appendix 3
Swept Path Analysis Drawings

EXECUTIVE SUMMARY

Ramboll UK has undertaken this Transport Assessment (TA) to support the planning application for the glass recycling and repurposing facility known as Stairfoot Glassworks ("proposed development") in Stairfoot, Barnsley, South Yorkshire.

The proposed site is located off the A633 Wombwell Road to the southeast of Barnsley and is situated in an area generally characterised by big-box retail and light industrial type units, abutted with green spaces and residential areas. The site is brownfield and was last in operational use as the Stairfoot Brickworks in 2008/2009. Since then, all buildings on the site have been demolished and the site is currently considered vacant / redundant with no activity.

The development proposals will provide a glass recycling and repurposing facility totalling 3,067sqm (33,017sqft) of gross internal area (GIA), comprising of the construction of a clad building for internal processing works, construction of a workshop and admin office and construction of a gatehouse, external cullet bays, external processing area, lorry park, storage areas, car park and access. The development will provide 33 car parking spaces (of which three spaces will be disabled access spaces and three spaces will have EV charging spaces) within a site car park, 12 heavy goods vehicles (HGVs) parking spaces (in the lorry park) and 12 covered and secure cycle parking spaces, located next to the admin office building in southeast corner of the site car park.

The proposed development will enable the applicant to amalgamate its two existing two sites into one purpose-built facility. This will result in removing approximately 304,000 HGV miles and 530,000kg of CO2 emissions from the local and national road network as HGVs will no longer need to travel between the two existing sites on Pontefract Road in Barnsley and the Ings Environmental Processing facility at Groveport, Scunthorpe.

The proposed development will provide high-quality pedestrian and cycle facilities throughout the site that will link with the existing local pedestrian and cycle network (i.e., NCNR 67) on and around Wombwell Lane. The site is well situated close to bus stops on Wombwell Lane with local bus services linking to other local towns and transport hubs in the area, such as Barnsley, Doncaster, and Rotherham bus/rail interchanges.

The development will employ 25 operational staff, made up of HGV drivers, site operatives and office/admin staff, who will oversee the day-to-day operation of the site. These staff will create approximately 146 trips to/from the site spread throughout a typical working day, with minimal trips occurring during the AM peak hour (08:00-09:00) and the PM peak hour (17:00-18:00).

This TA has demonstrated that the proposed development is policy compliant with respect to transport and is considered to have no material impact on the local highway network. The development provides safe access for all vehicles, pedestrians and cyclists using the site and is accessible by foot, cycle, and public transport. An Interim Travel Plan has also been prepared for the development, which will help encourage sustainable travel choices for all users of the development and will further mitigate any potential transport impacts of the site.

In conclusion, this TA considers that the proposed development should be supported by Barnsley Metropolitan Borough Council (BMBC) Highways on highway and transport grounds.

1. Introduction

1.1 Background

Ramboll UK Limited (Ramboll) has been instructed by Potters Ballotini Ltd ("the Applicant") to prepare a Transport Assessment (TA) to support the planning application for the proposed waste glass recycling and repurposing facility known as Stairfoot Glassworks ("the proposed development") in Stairfoot, Barnsley, S70 ENS ("the site").

The proposed site (shown in Figure 1.1) is located off the A633 Wombwell Road on the former Stairfoot Brickworks site to the southeast of Barnsley and is in an area generally characterised by big-box retail and light industry type units, abutted with green open space and residential areas. The site is brownfield and whilst was used for industrial type activities previously, the site is currently considered vacant / redundant with no activity.

Figure 1.1: Proposed Site Red-Line Boundary



1.2 Pre-Application Consultation

This TA has been prepared in accordance with pre-application consultation between Ramboll (acting on behalf of the applicant) and BMBC. The pre-application consultation was undertaken as follows:

- A virtual pre-application meeting presentation was delivered to BMBC planning officers on 24 November 2023 by the applicant and Ramboll to present the scheme and get the initial feedback of the application.
- In terms of transport feedback, Elaine Ward (Group Leader, Development Management, BMBC) confirmed that TA, Interim Travel Plan (ITP) and swept path analysis of the site access and Wombwell Lane would be required.
- A consultation response from the local highway authority was also provided by Sarah Sharp via email on 02 November 2023 which stated the following:
    - The principle of the development has been previously agreed however, in support of any forthcoming application, the applicant should ensure a full Transport

Assessment is included with a supporting Interim Travel Plan. The outcomes/targets of which, should be based on the findings of the TA.
    - A swept path analysis should be provided as part of the detailed design for the proposed access improvements.
    - The access should be constructed in accordance with the standards set out within DMRB CD123 and a stage 1 road safety audit in accordance with DMRB GG119 should be provided.
    - Achievable visibility splays should be shown on the site plan for a minimum visibility of 4.5m x 120m is required.
    - A construction traffic management plan (CTMP) should be included. The CTMP shall include details of (but not be limited to):
        - Routeing, volumes and timing of construction and maintenance vehicles.
        - Parking / offloading areas for construction / delivery and maintenance vehicles.
        - Management of construction / delivery vehicles to and within the site
        - Proposed temporary signage.
        - Measures to control mud and dust from the site by construction / delivery vehicles during the works.
- The site has been designated as Use Class B2 (General Industry).

1.3 Report Purpose and Structure

This TA has been prepared to present all the material necessary to support the proposed planning application proposals and this report is structured as follows:

- Chapter 2 – **Policy Review** – summarises the national and local transport policy context.
- Chapter 3 – **Baseline Conditions** – summarises the current transport and access conditions for the proposed development site.
- Chapter 4 – **Proposed Development** – presents the development proposals.
- Chapter 5 – **Trip Generation** – analyses the estimated trip generation for the proposed development.
- Chapter 6 – **Transport Considerations** – considers the implications of the proposed development for the local highway network.
- Chapter 7 – **Policy Compliance** – tabulates how the proposed development complies with the national and local transport policy presented in chapter 2.
- Chapter 8 – **Conclusion** – concludes the TA.

2. Policy Review

2.1 National Planning Policy Framework

The National Planning Policy Framework[1] (NPPF) sets out the Government's planning policies for England and how these are expected to be applied. The NPPF constitutes guidance for local planning authorities and decision-makers both in drawing up plans and as a material consideration in determining applications.

Paragraph 115 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 would be severe*."

Paragraph 116 states: "*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.

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

Paragraph 117 details 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 transport statement or transport assessment so that the likely impacts of the proposal can be assessed."* Accordingly, the planning application is supported by this TA and associated reports, including an Interim Travel Plan.

Barnsley's Local Plan[2] sets out the key elements of the planning framework for Barnsley, and the approach to its long-term physical development to achieve the Council's vision.

The Local Plan has 3 key roles in accordance with the Government's Framework (NPPF) namely economic, social, and environmental, and will deliver sustainable development. To support Barnsley's ambitions and vision the Local Plan objectives are:

- Provide opportunities for the creation of new jobs and protection of existing jobs.
- Improve the conditions in which people live, work, travel and take leisure.
- Widen the choice of high-quality homes.
- Improve the design of development.
- Protect and enhance Barnsley's environmental assets and achieve net gains in biodiversity.

[1] National Planning Policy Framework - Guidance - GOV.UK (www.gov.uk)

[2] https://www.barnsley.gov.uk/media/17249/local-plan-adopted.pdf

As stated in chapter 4 of the Local Plan, Barnsley's economy is too small for the size of the borough and the targets as set out in the "Jobs and Business Plan" are to create more new businesses, job opportunities and achieve diversification of the business base towards higher productivity sectors.

Policy T3 of the Local Plan states that:

"New development will be expected to:

- *Be located and designed to reduce the need to travel, be accessible to public transport and meet the needs of pedestrians and cyclists.*
- *Provide at least the minimum levels of parking for cycles, motorbikes, scooters, mopeds and disabled people set out in the relevant Supplementary Planning Document.*
- *Provide a transport statement or assessment in line with guidance set out in the National Planning Policy Framework and guidance including where appropriate regard for cross boundary local authority impacts.*
- *Provide a travel plan statement or a travel plan in accordance with guidance set out in the National Planning Policy Framework including where appropriate regard for cross boundary local authority impacts. Travel plans will be secured through a planning obligation or a planning condition.*

Where levels of accessibility through public transport, cycling and walking are unacceptable, we will expect developers to take action or make financial contributions in accordance with policy I1.

If it is not possible or appropriate for the minimum amount of parking for cycles, motorbikes, scooters and mopeds to be met on site, the developer must provide, or contribute towards, off-site parking, or improve or provide other forms of travel."

The Local Plan states also that where a proposed development is expected to generate relatively low numbers of trips or traffic flows, with minor transport impacts, a less detailed transport statement may be sufficient.

Further, Policy T4 states that "*New development will be expected to be designed and built to provide all transport users within and surrounding the development with safe, secure, and convenient access and movement.*

If a development is not suitably served by the existing highway or would create or add to problems of safety or the efficiency of the highway or any adjoining rail infrastructure for users, we will expect developers to take mitigating action or to make a financial contribution to make sure the necessary improvements go ahead. Any contributions will be secured through a planning obligation or planning condition."

2.2 Barnsley, Doncaster and Rotherham Joint Waste Plan

The Barnsley, Doncaster and Rotherham Joint Waste Plan[3] sets out the overall approach to managing waste across Barnsley, Doncaster and Rotherham over the next 15 years.

As stated in the Joint Waste Plan, as landfill is becoming increasingly expensive and scarce, there is an urgent need to develop new technologies and alternative solutions to manage waste in a

[3] https://www.barnsley.gov.uk/media/18273/barnsley-doncaster-and-rotherham-joint-waste-plan.pdf

way that reduces emissions, conserves or produces new resources and protects or enhances the quality of the environment.

A target of the Joint Waste Plan is to develop a well-planned and integrated network of waste facilities across the three boroughs to manage over one million tonnes of municipal, commercial, and industrial waste per annum and to achieve this, new sites will be allocated to manage waste by other means other than landfill and secure the necessary capacity over the plan period.

2.3 Supplementary Planning Document: Sustainable Travel

The Supplementary Planning Document (SPD) Sustainable Travel[4] provides greater detail on the Local Plan policies and should be a "material" of consideration when planning applications are decided.

The objective of this SPD is to ensure that the accessibility of new development via public transport, walking and cycling is acceptable to promote sustainable transport and active travel and where possible enhance the safety, efficiency, and sustainability of the transport network to meet Barnsley MBC's economic, health and air quality aspirations.

The proposed development is located within the Accessibility Improvement Zone in the east of the Borough and according to SPD Sustainable Travel this Zone is a focus for transport investment to improve connectivity and support economic growth.

Further, where levels of accessibility through public transport, cycling and walking are unacceptable, it is expected that developers will take action or make financial contributions in accordance with policy I1.

2.4 Barnsley Borough Moving from A to B (Transport Strategy)

Barnsley's Transport Strategy[5] is closely aligned with the Barnsley 2030 Vision and outlines Council's commitment to improving transport options for every member of the community and to reducing the negative impacts of travel on the borough.

The objectives and commitments as set out in Barnsley's Transport Strategy are:

- To Transform the Streets and Places to Enable an Increase in Cycling and Walking.
  Commitments
  - To increase cycling throughout the borough and secure the necessary funding to make it happen.
  - To make walking a much more attractive and accessible option for trips less than 2 miles.
  - To increase accessibility and mobility in Barnsley by public transport through securing new services, more capacity and greater service frequencies or appropriate routes from Public Transport Operators.

- Support Economic Growth and Regeneration.
  Commitment
  - To achieve the best deal for Barnsley when new development occurs in terms of sustainability, accessibility, and financial contributions to transport investment.

[4] https://www.barnsley.gov.uk/media/23498/sustainable-travel-spd-update-adoption-2022.pdf
[5] https://www.barnsley.gov.uk/media/22023/barnsley-transport-strategy.pdf

- Reduce conventional vehicular trips on the network, for journeys of less than 2 miles.
  Commitment
  - To work with Ultra Low Emission Vehicle (ULEV) charging network operators and road hauliers to ensure the road network operates optimally for all whilst reducing the negative impacts of vehicle use.

- To Reduce and Mitigate the Impact of Transport-based Emissions and Noise in Barnsley.

- Reduce Killed and Seriously Injured (KSI) incidents and slight accidents on our roads.
  Commitment
  - To reduce fatalities on Barnsley's roads to zero, and total casualties to below 400 by 2030

2.5 Supplementary Planning Document: Parking

This SPD offers guidance to developers, architects, agents and landowners considering submitting a planning application. It supplements 'Local Plan Policy T3 New Development and Sustainable Travel' by setting out the parking standards that the Council will apply to all new development.

The proposed development is Use Class B2 and is situated outside of the main Barnsley urban area. Table 2.1 presents the car, cycle and motorcycle parking standards as set out in the SPD for the proposed Use Class and location.

Table 2.1: Barnsley MBC Parking Standards – Use Class B2 (Borough Wide excluding Urban Barnsley)

Type of Space	Standard	Description
Car (Recommended provision)	1 space per 30-50m^2	Over 2500m^2
	1 space per 60m^2	All development between 500m^2 and 2500m^2
	1 space per 50m^2	All development less than 50m^2
Car – Disabled (Recommended provision)	1 space for every disabled motorist employee, plus 5% of the total provision for visitors and customers plus a further 4% should be capable of enlargement or laid out as enlarged standard spaces	Minimum standard to include both employees and visitors
Car – ULEV Charging Points	10% of the total car park capacity	Minimum standard
Cycle (Minimum provision)	1 space per 40 non-residential staff	Minimum standard, Long stay only
Motorcycle	1 space per 20 car parking spaces with an absolute minimum provision of 1 space	Minimum standard

The parking SPG sets out all the design, location and safety requirements for each type of parking.

For non-residential developments, car parking bays should be 5m long and 2.5m wide, with a 6m aisle width and a 3m reversing area at the end of the aisle. Each bay must be clearly marked and defined using appropriate permanent marking material.

The guidance states disabled access spaces should be close to the building entrances and spaces should be 2.4m x 4.8m with a 1.2m wide marked access zone between spaces and a 1.2m wide safety zone for boot / rear access.

For cycle parking, short stay and long stay parking is considered separately. Long stay spaces are for commuting cyclists, and it is essential that the spaces are covered and capable of being made secure and subject to regular surveillance by staff or passers-by. They should be conveniently located and well lit, and ideally provided inside the building. Short stay cycle spaces are mainly for visitors to the development. They must be located close to entrances, where they are convenient to use, in a well-lit area that is subject to regular surveillance by passers-by and occupants of the building. The stands must give support to both the wheels and the frame and enable all parts of the cycle to be secured. The 'Sheffield Stand' design is preferred.

It is also necessary to provide facilities for powered two-wheel vehicles such as secure anchor points, located close to the entrance to be convenient to use in an area which benefits from regular surveillance. Provision will be in addition to the provision set out in Table 2.1 and should be provided on a scale of 1 space per 20 car parking spaces with an absolute minimum provision of 1 space.

The Council encourages the provision of electric vehicle charging infrastructure, with the guidance requiring 10% of total car parking capacity. From the 15th of June 2022, the requirements for provision of electric vehicle charging points falls under 'The Building Regulations 2010 Approved Document S Infrastructure for the charging of electric vehicles[6].

[6] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1057375/AD_S.pdf

3. Baseline Conditions

This chapter provides a review of the existing transport setting associated with the proposed development site.

3.1 Existing Site

An aerial image of the proposed development site is shown in Figure 3.1, highlighting the existing site, which has a total area (red line boundary) of 6.39 hectares.

Figure 3.1: Existing Site



Source: Google Maps

The site was last in operational use as the Stairfoot Brickworks which were operated by Hanson Building Products Ltd until the site's closure in 2008/2009. Since then, all buildings on the site have been demolished.

3.2 Local Highway Network

The site is currently accessible off A633 Wombwell Lane, which is a lit single carriageway road subject to a 40mph speed limit with parking restrictions on both sides of the road. The A633 Wombwell Lane forms a strategic link between Barnsley (to the north) and Rotherham, some 12km further south.

To the north-west of the site sits a major signal-controlled intersection of the A633 (Barnsley to Rotherham) and the A635 (Barnsley to Doncaster) with the B6100 (a more local route linking to the A61 to the west). This junction is known locally as "Stairfoot Roundabout" and is subject to severe congestion at various times of the week, especially during the network peak hours, as well as other periods coinciding with the operation of nearby retail outlets.

Between the site and Stairfoot roundabout is a further signal-controlled junction, which provides access to the Tesco Supermarket and several other major retail outlets. The A633 around this point and south towards Wombwell, similarly suffers from peak hour congestion.

3.3 Public Transport Accessibility

3.3.1 Bus Services

Table 3.1 presents the maximum walking distance to bus stops in urban areas, as recommended in the "Buses in Urban Developments (20218)[7]" report prepared by the Institution of Highways and Transportation in January 2018.

Table 3.1: Recommended Maximum Walking Distances to Bus Stops

Urban Location	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

The nearest bus stops to the proposed development are located approximately within 50m of the main entrance of the site, on both sides of Wombwell Lane and therefore well within the recommended walking distances to bus stops presented in Table 3.1.

Table 3.2 summarises the frequencies of the bus services provided at the bus stops close to the proposed development main entrance.

Table 3.2: Local Bus Service Information

Stop	Approx. Walk from Site	Service Number	Route	Approximate Maximum Daytime Frequency (mins)		
				Mon – Fri	Sat	Sun
Wombwell Lane / Caulk Lane	50m	X20	Barnsley Bus/Rail Interchange - Wombwell - Old Moor - Manvers - Mexborough - Conisbrough - Warmsworth – Doncaster Bus/Rail Interchange	60mins (07:22 – 18:07)	60mins (07:19 – 18:07)	N/A
		22X	Rotherham Bus/Rail Interchange – Parkgate - Rawmarsh – Manvers - Wath Upon Dearne – Wombwell – Brampton – Barnsley Bus/Rail Interchange	15mins (06:22 – 23:30)	20mins (06:31 – 23:28)	60mins (08:47 – 23:28)
		226	Barnsley Bus/Rail Interchange – Stairfoot – Wombwell - Wath upon Dearne - Bolton upon Dearne – Goldthorpe - Thurnscoe	30mins (06:32 – 23:32)	30mins (06:30 – 23:32)	60mins (08:36 – 22:36)

The X20 bus service operates between Barnsley Bus/Rail interchange and Doncaster Bus/Rail interchange, every hour from approximately 07:20 until approximately 18:00, Monday to Saturday.

[7] CIHT - BUSES BROCHURE 2018_cs4.indd

The 22X bus service operates between Rotherham Bus/Rail interchange and Barnsley Bus/Rail interchange, every 15-20 minutes Monday to Saturday from approximately 06:30 until approximately 23:30 and hourly on Sundays from 08:47 until 23:28.

The 226 bus service operates between Barnsley Bus/Rail interchange and Thurnscoe via Wath upon Dearne, every 30 minutes Monday to Saturday from 06:30 until 23:32 and hourly on Sundays from 08:36 until 23:36.

3.4 Rail Accessibility

Barnsley and Wombwell train stations are the nearest stations to the site located approximately 4.1km and 3.5km respectively. Barnsley train station can be reached from site via all three bus services stopping at the bus stops on Wombwell Lane close to the site entrance. The X20 bus service also provides access to Doncaster rail/bus interchange and the 22X bus service provides access to Rotherham rail/bus interchange.

Rail services operate frequently through Barnsley station. Northbound services connect to Leeds and Huddersfield, whilst southbound services to Sheffield, Nottingham and Lincoln Central. Services at Wombwell station currently run to Sheffield and Huddersfield on the Penistone Line and Leeds via Wakefield Kirkgate and Castleford on the Hallam Line respectively. A single southbound service runs to Nottingham on Saturday mornings only at 06.22.

3.5 Pedestrian and Cycle Accessibility

3.5.1 Pedestrian Accessibility

Pedestrian footways are present along both sides of Wombwell Lane. The nearest crossing facility to the site is located 150m to the north of the site entrance on Wombwell Lane and is an informal crossing with dropped kerbs, tactile paving, and a traffic island. A formal staggered pedestrian crossing facility is provided at the signalised junction approximately 270m to the north of site entrance. Both pedestrian crossing facilities provide access to the retail developments on the western side of Wombwell Lane.

3.5.2 Cycle Accessibility

National Cycle Network Route (NCNR) 67 runs along the northern boundary of the proposed site and can be accessed off Wombwell Lane at the 'Stairfoot Station Heritage Park' entrance approximately 400m to the north of the site entrance. NCNR 67 runs from Long Whatton near Loughborough to join National Route 71 near Northallerton in Yorkshire. Figure 3.2 shows a map extracted from Systrans website[8]. No cycling facilities are provided on Wombwell Lane.

[8] https://explore.osmaps.com/?lat=53.540588&lon=-1.431261&zoom=15.2048&style=Standard&type=2d&overlays=os-ncn-layer

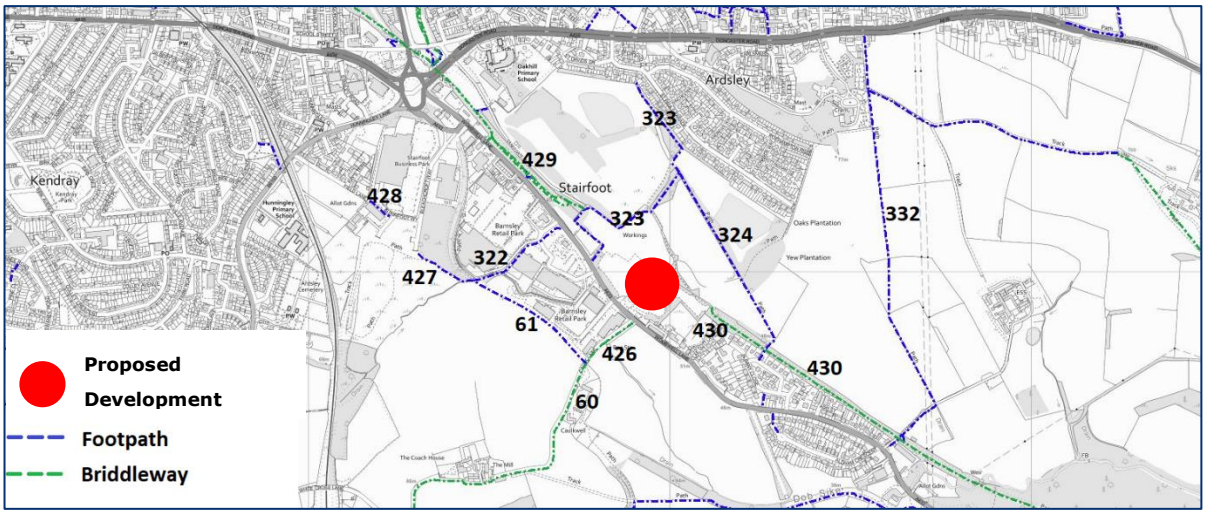
Figure 3.2: National Cycle Network Route 67



3.5.3 Public Rights of Way

A well-connected Public Right of Way (PRoW) network in the form of footpaths and bridleways run close to the site, as shown in Figure 3.3.

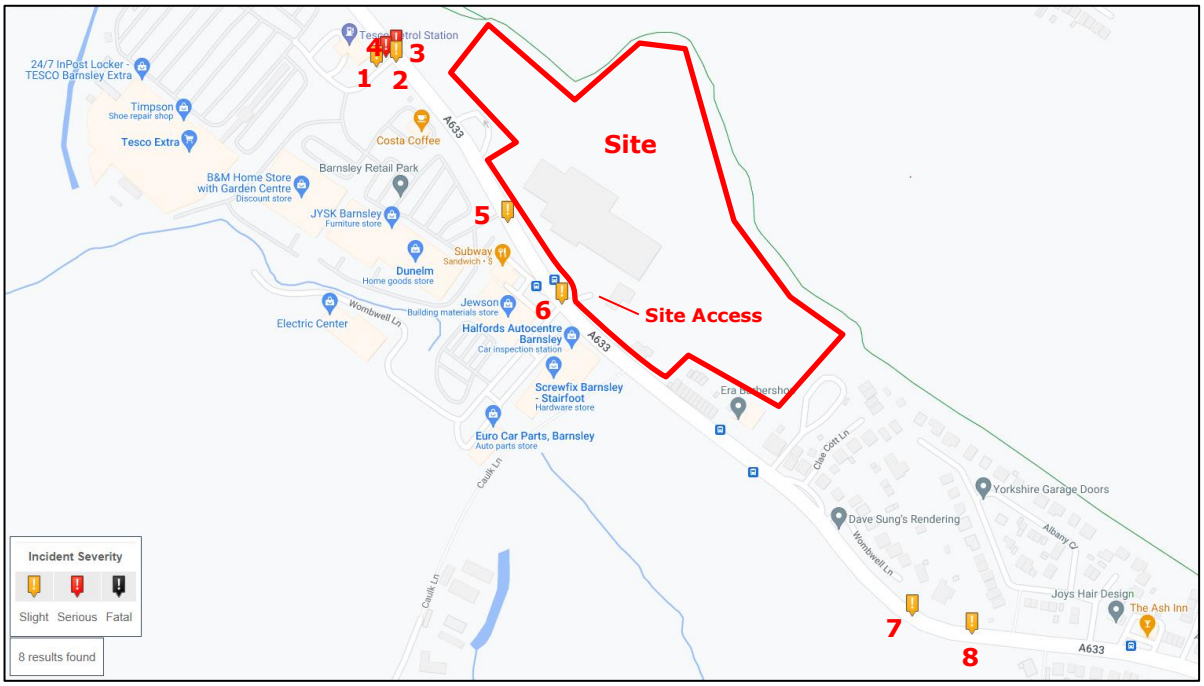
Figure 3.3: Nearby PRoWs



3.6 Accident Analysis

To determine the safety of the existing highway in the vicinity of the proposed development, a review of the collision database 'Crashmap' has been undertaken for the latest 5-year period (2017-2021).

Figure 3.4: Crashmap Review



Source: Crashmap.com

The Crashmap review, shown in Figure 3.4, highlights eight incidents have occurred close to the proposed development over the latest 5-year period, of which six incidents were slight, two were serious and none were fatal. Details of the serious incidents are as follows:

- **Incident 3 (Serious)** – occurred at the A633/Tesco Extra signal junction on 20/08/2018 and involved two vehicles and had one casualty.
- **Incident 4 (Serious)** – occurred at the A633/Tesco Extra signal junction on 20/12/2021 and involved two vehicles and had one casualty.

Review of the above incident's highlights that all the accidents close to the proposed site access occurred along the A633, with one slight incident at the site access/A633/Wombell Lane junction, which is a four-arm priority junction providing access to DIY businesses to the south of the A633. There is a cluster of four incidents (two slight and two serious) to the north of the proposed site at the Tesco Extra Access Road/A633 junction with the remaining three incidents occurring along the A633. None of the incidents involved vulnerable users (i.e., pedestrians or cyclists), however, incident 2 (Slight) involved one motorcyclist.

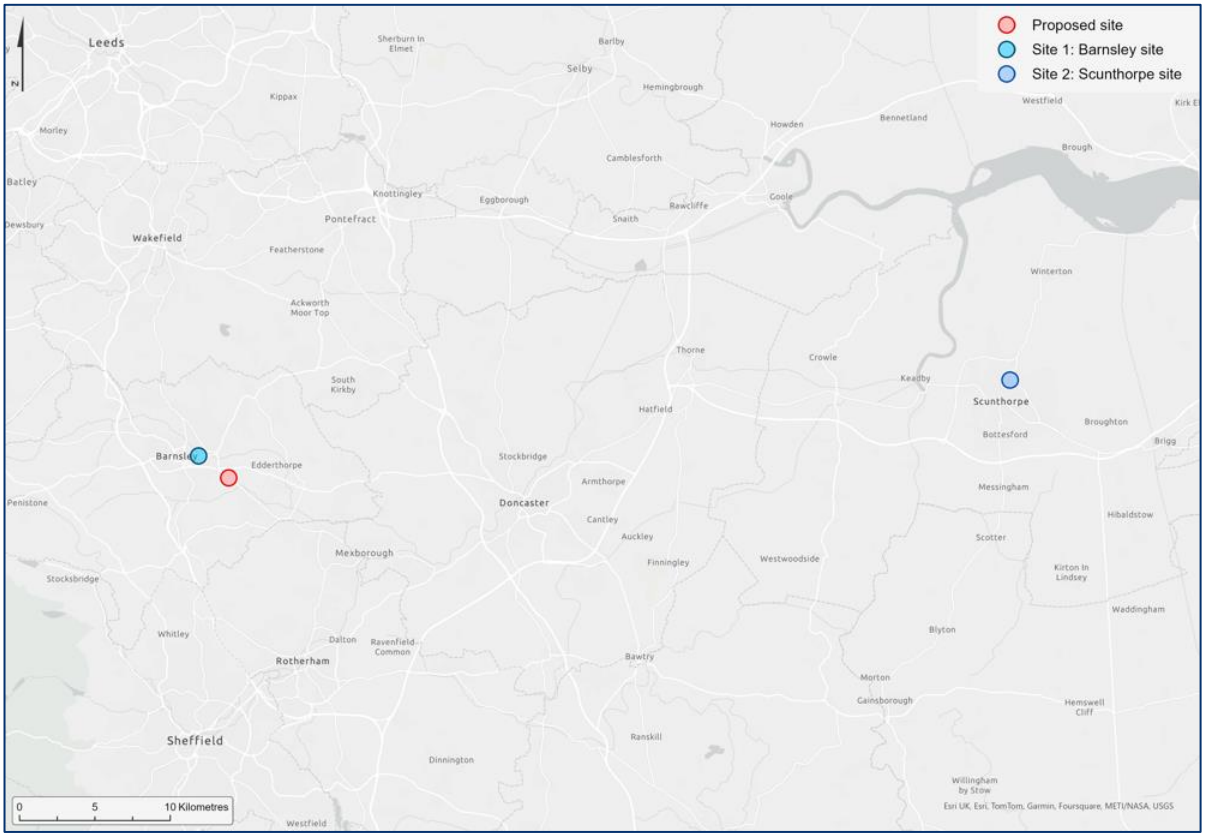
Review of the number and severity of these incidents over the latest five years suggests there are no safety concerns at the site access or close to the site as there has only been 8 incidents of which six were slight and two were serious (both occurring to the north of the site at the Tesco Extra Access Road/A633 junction), which would suggest it is appropriate in highways safety terms to accommodate the existing levels of vehicle activity.

3.7 Existing Operation

Currently the applicant (Potters Ballotini Ltd) operates their Barnsley operation across two sites. The main site is in the Hoyle Mill area of Barnsley and the other site is the Ings Environmental

Processing facility at Groveport, Scunthorpe. Both sites employ 22 staff in total, with 16 staff working at the Barnsley site and 7 staff working at the Scunthorpe site.

Figure 3.5: Existing Site Locations



As shown in Figure 3.5, the Barnsley site (Site 1) is located to the east of Barnsley city centre, approximately 3.2km to northwest of the proposed site and the Scunthorpe site (Site 2) is located to the north of Scunthorpe town centre, approximately 70km to the east of the proposed site.

The Barnsley site is used to collect raw material for glass from suppliers from around the country and then this material is size segregated and then shipped to the Scunthorpe site via Bulk Tippers to be processed. Once at the Scunthorpe site, the raw materials are processed removing the waste, the crushed cullet (recycled glass) is then loaded onto bulk tipper trucks ready for delivery to customers around the UK.

During the process of transporting the material between the two sites, approximately 304,000 HGV miles are created across a typical year equating to approximately 530,790kg of CO_2 emissions. This is one of the main reasons for creating the proposed development, as the new facility will consolidate the operations of both sites in one purpose-built facility, thus removing the need for HGV trips between the sites and subsequently removing vehicle miles, emissions, traffic, and congestion from the local and national road network.

4. Proposed Development

4.1 Development Proposals

The proposed development will be a glass and metal recycling facility and is being developed to enable the applicant to amalgamate two existing sites (chapter 3.6) into one purpose-built facility.

The proposed works include the construction of a clad building for internal processing works, construction of a workshop and admin office and construction of a gatehouse, external cullet bays, external processing area, lorry park, storage areas, car park and access.

The building footprint will cover 3,067sqm (33,017sqft) of GIA and will be split into the following areas as shown in Table 4.1.

Table 4.1: Building Footprint

Building Area	sqm	sqft
Internal Processing	2,739	29,486
Workshop	162	1,744
Admin Office	144	1,551
Gatehouse	22	236
Total Area	**3,067**	**33,017**

The proposed development will be operational Monday to Friday with no weekend working. Operational hours for the proposed development will be from 07:00 in the morning until 19:00 in the evening. HGV drivers will arrive early from 01:00 to start the early morning skip truck collections and site operatives and office/admin staff will start to arrive on site from 07:00 when the main site buildings open, with the last staff departing at 19:00.

The proposed site plan in Appendix 1 shows that the site is split between the large internal processing building and workshop in the centre of the site, the external cullet bays (for picking and screening cullet) to the northwest of the site, HGV parking in the lorry park to the east of the processing building and the car park and admin office to the south of the processing building.

4.2 Staff Numbers

The proposed development will employ 25 operational staff who will oversee the day-to-day operation of the site. The staff will be split between HGV drivers, site operatives and office/admin staff, as detailed in Table 4.2. This proposed development will employ 3 additional staff compared to the existing operation (22 staff: chapter 3.6).

Table 4.2: Operational Staff Breakdown

Employee Type	Number of Employees	Typical Shift Duration	Typical Shift Hours
Lorry Drivers	8	10 hours	01:00-04:00 to 13:00-16:00
Operatives	12	8 hours	07:00-10:00 to 15:00-18:00
Office/Admin Staff	5	8 hours	07:00-09:00 to 15:00-17:00
Total Staff	**25**		

The estimated arrival and departure movements for all operational staff is detailed in the Trip Generation chapter, in chapter 5.1.

4.3 Access

4.3.1 Vehicular Access

Vehicular access will be taken from Wombwell Lane via an existing priority junction and short access road that will be improved to accommodate safe HGV access/egress to and from the site. All vehicles will enter the site via secure gates off Wombwell Lane which will be electrically operated and take the form of double cantilever sliding gates with a central post (as shown as '4' on the proposed site plan in Appendix 1). Staff will enter via a fob system and all non-staff will require clearance from the Gatehouse.

Once through the security gate, all staff and visitor vehicles will be able to enter the proposed staff and visitor car park to the east of the main entrance via a dedicated vehicle access. All other vehicles entering the main site to the north will be required to enter through the Gatehouse, where all large HGVs will be weighed in and out on the site weighbridge.

The site was previously used for mineral extraction and processing, and undoubtedly generated HGV traffic. Recent amendments to Wombwell Lane, including the provision of right turn lanes within a ghost island directly in front of the existing entrance, have narrowed the lane widths resulting in the existing site access being unsuitable for HGVs, with vehicles being unable to remain in lane when navigating the access.

To mitigate the recent road amendments, the bell mouth for the existing site access will be improved through widening, as consented under planning permission 2022/1218 dated 28th September 2023. Due to increasing the crossing distance for pedestrians travelling along Wombwell Lane, a refuge island has been incorporated into the design.

Following further engagement with the BMBC's engineers, the proposed junction has been updated to demonstrate visibility splays of 4.5m by 120m in both directions from the site access to Wombwell Lane.

The proposed design has been designed to accommodate the movements of a 16.5m articulated truck and a 12m rigid vehicle in and out of the site. The security gates will be set back 27m from the highway, so a 16.5m long articulated truck could be accommodated on the access road, clear of the highway if the gates were closed upon arrival.

Details of the proposed access are shown in the junction design drawing in Appendix 2.

The proposed improvement works to the site access will ensure HGV movements to and from the site can take place safely and efficiently, with vehicles not encroaching into adjoining traffic lanes to complete their manoeuvres. Details of the vehicle swept path analysis which demonstrates that the access can be safely used by all vehicles requiring to access the site is presented in chapter 6 and the resulting swept path drawings are presented in Appendix 3.

4.3.2 Pedestrian & Cycle Access

The proposed development will be accessed by pedestrians and cyclists via a dedicated pedestrian gate and entrance to the south of the admin block, to the southeast of the main vehicular access (as shown as '11' on the proposed site plan in Appendix 1). Staff will enter via a fob system and all non-staff will require clearance from the Gatehouse.

The proposed development will provide high quality pedestrian and cycling infrastructure throughout the site allowing the development to be accessed by people using sustainable forms of transport.

As shown on the proposed site plan, the development will provide safe pedestrian walking routes around the site, with pedestrian/cycle crossings across the main site car park and access road through the Gatehouse.

4.4 Parking

4.4.1 Car Parking

The proposed development will provide a total of 33 car parking spaces for staff and visitors in accordance with BMBC parking standards to the southeast corner of the site, of which 30 spaces will be standard spaces and three will be disabled space. Of the 30 standard spaces, three will have electric vehicle (EV) facilities and of the three disabled spaces, one space will have EV facilities.

The breakdown of car parking provision is detailed in Table 4.1 and the location of the car park is shown as '2' on the proposed site plan in Appendix 1.

Table 4.1: Proposed Development Car Parking Provision

Parking Type	Total Car Spaces
Standard Spaces	27
Standard Spaces with EV facilities	3
Disabled Spaces	2
Disabled Space with EV facilities	1
Total Number of Car Parking Spaces	**33**

As presented in chapter 2.6, maximum parking standards for the proposed development are 1 space per 30-50sqm of floor area for a development on the edge of Barnsley town centre over 2,500sqm with B2 Use Class.

Applying the identified 'worst-case' parking standard (i.e., 1 space per 50sqm) to the proposed development floor area (3,067sqm) equates to a maximum provision of 61 spaces. The development will provide 33 spaces to accommodate staff and visitor demand, of which three spaces (10%) will be disabled spaces and four spaces will have EV facilities (three normal spaces

and one disabled space) and is therefore compliant the BMBC parking standards presented in chapter 2.6.

The number of spaces provided will allow staff and visitors travelling from around Barnsley and the rest of the country to park safely on site from early morning until the evening, avoiding indiscriminate parking on local roads in the local area. All efforts will be made to reduce staff car trips to/from the site via the accompanying Interim Travel Plan, and where possible staff will be encouraged and incentivised to use other more sustainable modes of travel to/from site.

4.4.2 HGV Parking

The proposed development will provide 12 HGV parking spaces in the lorry park on the eastern side of the site, as shown on the proposed site plan (Appendix 1). A fleet of eight skip trucks will be parked on site overnight in the lorry park, and there will be capacity for other HGVs that enter the site to park, such as the bulk tipper trucks which will come to site to unload/load cullet and raw materials (as described in chapter 5.1.3).

4.4.3 Cycle Parking

The proposed development will provide 12 cycle parking spaces for staff and visitors, in the form of 'Sheffield' stands within a covered and secure cycle parking shelter.

The cycle shelter will be located on the western side of the admin office building (shown as '16' on the proposed site plan in Appendix 1).

4.5 Servicing and Deliveries

All servicing and deliveries will be undertaken within the site car park to the north of the admin building.

Operational deliveries will occur sporadically throughout the day avoiding peak traffic hours on the local highway network and access to the car park will be made via the main vehicular entrance. Once in the car park, delivery or servicing vehicles can turn and drop-off/pick-up within the hammerhead located at the eastern end of the car park.

The bin stores will be located on the eastern elevation of the admin building in the car park (shown as '7' on the proposed site plan in Appendix 1). Refuse vehicles will be able to access the bins by driving into the car park in forward gear and manoeuvring into the hammerhead at the eastern end of the car park, where the refuse vehicle can park, pick-up the waste, turn around and depart the site via the main entrance. Refuse vehicles can enter the site and car park safely without having to access the main interior site through the Gatehouse, as demonstrated by the refuse vehicle swept path analysis presented in in chapter 6.

All servicing and deliveries attributed to the glass production can be accommodated within the main interior site through the Gatehouse, as demonstrated by the swept path analysis for the HGVs presented in chapter 6.

5. Trip Generation

This chapter of the report presents the estimated trips generated by the proposed development.

5.1 Operational Vehicle Trips

The proposed development will generate the following operational vehicle trip types:

- Staff car trips
- Skip truck trips
- Bulk Tipper truck trips
- Delivery/Visitor trips

Table 5.1 presents the estimated operational trip profile for the proposed development across a typical (midweek) working day.

Table 5.1: Proposed Development Operational Vehicle Trip Profile

From	To	Staff Trips IN	Staff Trips OUT	Skip Trucks OUT	Skip Trucks IN	Bulk Tipper OUT	Bulk Tipper IN	Delivery / Visitor IN	Delivery / Visitor OUT	Total Trips
00:00	**00:59**	-	-	-	-	-	-	-	-	**0**
01:00	**01:59**	1	-	-	-	-	-	-	-	**1**
02:00	**02:59**	2	-	1	-	-	-	-	-	**3**
03:00	**03:59**	2	-	2	-	-	-	-	-	**4**
04:00	**04:59**	-	-	2	-	-	3	-	-	**6**
05:00	**05:59**	1	-	-	-	4	-	-	-	**5**
06:00	**06:59**	8	-	2	-	-	6	-	-	**16**
07:00	**07:59**	4	-	2	1	6	-	-	-	**13**
08:00	**08:59**	3	-	-	2	-	1	1	1	**8**
09:00	**09:59**	-	-	1	-	1	-	-	-	**2**
10:00	**10:59**	3	-	2	2	-	3	3	3	**16**
11:00	**11:59**	-	1	2	-	3	2	1	1	**10**
12:00	**12:59**	-	2	2	2	2	2	-	-	**10**
13:00	**13:59**	-	2	-	2	2	-	2	2	**10**
14:00	**14:59**	1	7	-	1	-	4	-	-	**13**
15:00	**15:59**	-	-	-	2	4	-	-	-	**6**
16:00	**16:59**	-	8	-	2	-	-	-	-	**10**
17:00	**17:59**	-	2	-	2	-	4	-	-	**8**
18:00	**18:59**	-	3	-	-	3	-	-	-	**6**
Total Trips		**25**	**25**	**16**	**16**	**25**	**25**	**7**	**7**	**146**

These trips represent a 'worst-case' trip scenario, whereby all staff will drive to site in single occupancy cars, where in reality, some staff may use other sustainable modes of travel (walking, cycling, public transport) as well as car share. A 'worst-case' trip scenario has been presented to

show the maximum number of trips that could be generated by the proposed development across a typical day. The skip truck and bulk tipper trips will be scheduled per day and are therefore known, and the 'other' trips are a maximum estimate of delivery/visitor trips to/from the site during a typical day.

An Interim Travel Plan has been prepared to accompany this planning application to encourage all staff and visitors to travel to/from the site by more sustainable travel modes, with the aim of reducing single occupancy car trips to/from the development.

Staff shift changeovers will be typically outside of network peak periods to reduce the impact of development generated trips on the local road network.

5.1.1 Staff Trips

The proposed development will employ 25 full time employees who will commute to/from the development according to their shift times. As per Table 4.2 (chapter 4.2), staff trips are broken down into three job types:

- **HGV drivers** – these trips are attributed to drivers of the skip trucks arriving to/from site by car. These drivers will arrive to site early in the morning between 01:00 and 04:00, park and undertake their skip truck driving duties across an approximate 10-hour shift, departing site in the afternoon once their shift has finished.
- **Site Operatives** – these trips are attributed to the site operatives who will work within the workshop and processing unit, undertaking a typical 8-hour shift, except for the maintenance staff who will work shorter shifts. These staff will arrive on site between 07:00-10:00 and depart site between 15:00-18:00.
- **Office/Admin Staff** – these trips are attributed to the office and admin staff, arriving on site between 08:00-10:00 and departing site between 16:00-19:00.

5.1.2 Skip Truck Trips

Skip truck trips will originate from the site as the proposed development will have 8 skip trucks located on site, which will be driven by eight HGV drivers. Each driver will make two trips out of the site and back per day in one of the onsite skip trucks, totalling 16 trips per day from/to the site during a typical day.

The skip trucks will pick up material from suppliers from around the country and return to site where the trucks will deposit the collected material in the concrete cullet collection enclosures described in chapter 4 and shown as '13' on the proposed site plan (Appendix 1). The skip drivers will then either do another skip run as part of their shift or if they are at the end of their shift, will park the HGV in the lorry park.

The first skip truck will depart at 02:00 in the morning and the last truck will arrive back at site at 18:00. All skip truck trips will depart and arrive back to site as per the skip truck trip profile shown in Table 5.1 and drivers will arrive on site before their first trip out and depart site after their last trip back.

5.1.3 Bulk Tipper Truck Trips

Bulk tipper trucks will originate off site and travel to the site to unload material into the concrete cullet collection enclosures (shown as '13' on the proposed site plan Appendix 1) and then pick up

finished glass and glass products (at area '10' on proposed site plan), whereby they'll transport the finished goods to the customer.

The first bulk tipper will arrive at site at 04:00 in the morning and the last bulk tipper will depart site at 19:00. All bulk tipper trips will arrive and depart the site as per the bulk tipper trip profile shown in Table 5.1.

5.2 Construction Traffic

It is estimated that the construction phase will generate significantly less trips than the operational phase and will be managed by a construction traffic management plan. Therefore, assessment of the construction phase trips has not been presented.

5.3 Trip Distribution

The trip distribution for each trip type (i.e., staff trips, skip truck trips, bulk tipper trips etc) has been estimated based on the following information for each trip type.

5.3.1 Staff Vehicles

Based on information received from the applicant, it has been identified that 60% of existing staff live to the south of the site (around Wombwell, Brampton and Hoyland) therefore accessing the site off Wombwell Lane from the south. The remaining 40% of staff live to the north and west of the site (around Barnsley, Cudworth and Penistone) and would therefore access the site off Wombwell Lane from the north.

Based on the above information, it has been assumed that 60% of staff trips for the proposed development will travel to/from the site from the south and 40% of staff trips will travel to/from the site from the north.

5.3.2 Skip & Bulk Tipper Trucks

90% of all skip and bulk tipper trucks will depart and arrive the site from the south of Wombwell Lane due to the location of the strategic road network to the south of Wombwell Lane and to avoid running HGVs close to Barnsley city centre.

5.4 Final Development Trips

Tables 5.2 to 5.4 present a summary of the estimated origin-destination trip generation (for all vehicles) at the main access junction across a full day and for the AM and PM peak hours. Full details of the estimated trip generation for the full day and AM and PM peak hours are presented in Appendix 3, segregated by trip type (staff, skip truck, bulk tipper and visitor trips).

Table 5.2: Trips at Access Junction (Full Day)

Total Trips		Destination			
		Wombwell Lane (N)	Development	Wombwell Lane (S)	Total
Origin	Wombwell Lane (N)	0	17	0	17
	Development	17	0	56	73
	Wombwell Lane (S)	0	56	0	56
	Total	17	73	56	146

Table 5.3: Trips at Access Junction (AM Peak: 08:00-09:00)

Total Trips		Destination			
		Wombwell Lane (N)	Development	Wombwell Lane (S)	Total
Origin	Wombwell Lane (N)	0	2	0	2
	Development	0	0	1	1
	Wombwell Lane (S)	0	5	0	5
	Total	0	7	1	8

Table 5.4: Trips at Access Junction (PM Peak: 17:00-18:00)

Total Trips		Destination			
		Wombwell Lane (N)	Development	Wombwell Lane (S)	Total
Origin	Wombwell Lane (N)	0	1	0	1
	Development	1	0	1	2
	Wombwell Lane (S)	0	5	0	5
	Total	1	6	1	8

As shown in Tables 5.2 to 5.4, the proposed development will generate a relatively low level of trip generation across a typical day with minimal estimated vehicle movements anticipated during the typically busier AM and PM peak hours.

6. Swept Path Analysis

Swept path analysis has been undertaken at the proposed development access junction and around the site for the following vehicles:

- a 16.5m Articulated HGV
- a 12m Rigid HGV
- a Fire Tender
- a Refuse Vehicle
- a Car

Swept path analysis drawings for the five vehicles are presented in Appendix 4.

6.1 16.5m Articulated HGV

Tracking for a large articulated HGV (16.5m in length) has been undertaken around the proposed scheme layout and access junction. Drawings SG-RAM-TR-00100 and SG-RAM-TR-00101 in Appendix 4 demonstrate that this HGV can enter the site via the main vehicular entrance, manoeuvre safely around the site, in and out of the HGV loading/unloading bays and lorry park and then safely exit the site back onto the A633 Wombwell Lane.

6.2 12.5m Rigid HGV

Tracking for a rigid HGV (12m in length) has been undertaken around the proposed site and access junction. Drawings SG-RAM-TR-00107 and SG-RAM-TR-00108 in Appendix 4 demonstrate that this HGV can enter the site via the main vehicular entrance, manoeuvre safely around the site, in and out of the HGV loading/unloading bays and lorry park and then safely exit the site back onto the A633 Wombwell Lane.

6.3 Fire Tender

Tracking for a fire truck with an aerial platform (12m in length) has been undertaken around the proposed scheme layout and access junction. Drawings SG-RAM-TR-00102 and SG-RAM-TR-00103 in Appendix 4 demonstrate that the fire truck can enter the site via the main vehicular entrance, manoeuvre around the site and then safely exit the site back onto the A633 Wombwell Lane.

6.4 Refuse Vehicle

Tracking for a refuse vehicle (7.9m in length) has been undertaken around the proposed scheme layout and access junction. Drawings SG-RAM-TR-00105 and SG-RAM-TR-00106 in Appendix 4 demonstrate that a refuse vehicle can enter the site via the main vehicular entrance, manoeuvre into the main site car park where the bin store located and then can safely turn around in the car park hammerhead and then exit the site back onto the A633 Wombwell Lane.

6.5 Car

Tracking for a car (4.8m in length) has been undertaken to/from the main site car park and access junction. Drawing SG-RAM-TR-00109 in Appendix 4 demonstrates that a car can enter the site via the main vehicular entrance, park in a multitude of car parking spaces in the car park and then safely exit the site back onto the A633 Wombwell Lane.

7. Policy Compliance

Table 7.1 summarises the compliance of the proposed development with relevance to national and local transport policy.

Table 7.1: Policy compliance

Policy Requirement	Policy Compliance
National Policy	
National Planning Policy Framework (NPPF)	
Paragraph 115 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 would be severe."	As demonstrated in chapter 4, the development will generate a relatively low level of staff trips and HGV trips will tend to travel outside of peak times, therefore it is considered that the development will have a negligible impact on the local highway network.
Paragraph 117 details 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 transport statement or transport assessment so that the likely impacts of the proposal can be assessed." Accordingly, the planning application is supported by this TA and associated reports, including a Travel Plan.	This Transport Assessment and Interim Travel Plan have been prepared to support the planning application for the proposed development to demonstrate that the proposed development complies with national planning policy. As detailed throughout this TA, the proposed development is designed to ensure the site is accessible to all; is accessible by walking, cycling and public transport in addition to private vehicles; has safe, clean and efficient delivery and servicing arrangements; provides electric vehicle charging; and has internal arrangements which prioritise the needs of people walking, cycling and using public transport.
Local Policy	
Barnsley Local Plan (January 2019)	
Policy T3 of the Local Plan states that: *New development will be expected to:* • *Be located and designed to reduce the need to travel, be accessible to public transport and meet the needs of pedestrians and cyclists.* • *Provide at least the minimum levels of parking for cycles, motorbikes, scooters, mopeds and disabled people set out in the relevant Supplementary Planning Document.* • *Provide a transport statement or assessment in line with guidance set out in the National Planning Policy Framework and guidance including where appropriate regard for cross boundary local authority impacts.* • *Provide a travel plan statement or a travel plan in accordance with guidance set out in the*	The proposed development complies with Policy T3 of the Barnsley Local Plan by: • Being located in a sustainable location whereby the site can be easily accessed by bus, cycling and walking, as detailed in chapter 3. • Providing cycle parking and disabled parking in line with local parking standards, as detailed in chapter 4.4. • Providing a Transport Assessment and Interim Travel Plan to support the application in line national and local policy.

National Planning Policy Framework including where appropriate regard for cross boundary local authority impacts. Travel plans will be secured through a planning obligation or a planning condition.	
Policy T4 states that: • New development will be expected to be designed and built to provide all transport users within and surrounding the development with safe, secure and convenient access and movement.	The proposed development complies with Policy T4 of the Barnsley Local Plan by: • Providing high quality pedestrian and cycling infrastructure within the site so that staff and visitors can move safely and securely around the site, as detailed in chapter 4.3.
Barnsley, Doncaster and Rotherham Joint Waste Plan	
As stated in the Joint Waste Plan, as landfill is becoming increasingly expensive and scarce, there is an urgent need to develop new technologies and alternative solutions to manage waste in a way that reduces emissions, conserves or produces new resources and protects or enhances the quality of the environment. A target of the Joint Waste Plan is to develop a well-planned and integrated network of waste facilities across the three boroughs to manage over one million tonnes of municipal, commercial and industrial waste per annum and to achieve this, new sites will be allocated to manage waste by other means other than landfill and secure the necessary capacity over the plan period.	The proposed development complies with the Barnsley, Doncaster and Rotherham Joint Waste Plan by amalgamating two glass production sites into one purpose built, state of the art facility. The result of amalgamating the two sites into one location is that the applicant will remove approximately 304,000 HGV miles from the road network across a typical year, thus subsequently removing thousands of vehicle miles, emissions, traffic and congestion from the local and national road network.
Supplementary Planning Document: Sustainable Travel	
The objective of the SPD is to ensure that the accessibility of new development via public transport, walking and cycling is acceptable in order to promote sustainable transport and active travel and where possible enhance the safety, efficiency, and sustainability of the transport network to meet Barnsley MBC's economic, health and air quality aspirations. Where levels of accessibility through public transport, cycling and walking are unacceptable, it is expected that developers will take action or make financial contributions in accordance with policy I1.	The proposed development complies with the supplementary planning document for sustainable travel by being located in a sustainable location with access to good public transport and walking and cycling routes, as detailed in chapter 3.3 and 3.5 respectively. The Travel Plan will promote sustainable transport and active travel.
Supplementary Planning Document: Parking	
This SPD offers guidance to developers, architects, agents and landowners considering submitting a planning application. It supplements 'Local Plan Policy T3 New Development and Sustainable Travel' by setting out the parking standards that the Council will apply to all new development.	The proposed development complies with the supplementary planning document for parking by providing vehicle and cycle parking in line with BMBC parking standards, as detailed in chapter 4.4.

8. Summary & Conclusion

This TA has been prepared by Ramboll on behalf of Potters Ballotini Ltd to support a full planning application for the proposed waste glass recycling and repurposing facility in Stairfoot, Barnsley, S70 ENS.

The development proposals are for a glass recycling and repurposing facility totalling 3,067sqm (33,017sqft) of GIA comprising of the construction of a clad building for internal processing works, construction of a workshop and admin office and construction of a gatehouse, external cullet bays, external processing area, lorry park, storage areas, car park and access.

The proposed development is being developed to enable the applicant to amalgamate its two existing two sites into one purpose-built facility. This will result in removing approximately 304,000 vehicle miles and 530,000kg of CO2 emissions from the local and national road network as HGVs will no longer need to travel between the Pontefract Road site in Barnsley and the Ings Environmental Processing facility at Groveport, Scunthorpe.

The development will employ 25 operational staff who will oversee the day-to-day operation of the site. The staff will be split between HGV drivers, site operatives and office/admin staff, as detailed in Table 4.2 (chapter 4.2).

The proposed development will provide 33 car parking spaces of which three spaces will be disabled access spaces, of which two standard spaces and one disabled space will have EV charging spaces. These spaces will accommodate the operational staff and visitors and the location of these spaces are shown in general arrangement site plan in Appendix 1. The development will also provide 12 HGV parking spaces within the lorry park area to accommodate the operational needs of the proposed development.

It is estimated that the development will create 146 trips to/from the site, spread throughout the day, with minimal trips occurring during the AM peak hour (08:00-09:00) and the PM peak hour (17:00-18:00). Staff shift changeovers will be typically outside the network peak hours and it is considered that these trips can be accommodated comfortably by the local highway network.

The proposed development will provide high-quality pedestrian and cycle facilities throughout the site and will provide a good pedestrian and cycle link from the site to the A633 and the existing local pedestrian and cycle network (i.e., NCNR 67).

All servicing and deliveries will be undertaken within the site car park adjacent to the northern elevation of the admin building and will occur sporadically through the day avoiding the network peak periods.

The proposed development provides safe access for all vehicles (as demonstrated by the swept path analysis in chapter 6), pedestrians and cyclists in and around the site and is accessible by foot, cycle, and public transport.

This Transport Assessment has demonstrated that the proposed development is policy compliant with respect to transport. Due to the low level of trip generation, it is considered the proposed development will have no material impact on the local highway network.

An Interim Travel Plan has been developed for the site, which will be promoted to all staff and users of the proposed development, to help encourage sustainable travel choices to/from the

development. This Interim Travel Plan will be updated to the Full Travel Plan once the new building has been fully occupied for over 6 months.

In conclusion, it is considered that the proposed development should be supported by BMBC Highways on highway and transport grounds.

Appendix 1
Proposed site plan

a1



N

SCHEDULE OF AREAS

Gross Internal Areas

Processing Building:	2739.3 m² / 29,486 sqft
(excluding external covered loading area of 788.8 m² / 8491 sqft)	
Workshop:	162.0 m² / 1744 sqft
Admin Building:	144.1 m² / 1551 sqft
Gatehouse:	22.0 m² / 236 sqft
Total GIA	3067.4 m² / 33,017 sqft

Site Development

Building Footprints (Gross External Areas)

Process Building:	3664.1 m² / 39,440 sqft
(including external covered loading area)	
Workshop:	185.5 m² / 1997 sqft
Admin Building:	160.2 m² / 1724 sqft
Gatehouse:	30.5 m² / 328 sqft
Total Footprint:	4040.3 m² / 43,489 sqft
Site area (red boundary):	63,872.5 m² / 6.39 ha / 15.8 acres
Development density:	6.3 % (total footprint / site area x 100)

Parking

Car parking spaces:	27
Disabed spaces:	3
EV spaces:	3
Total car parking spaces:	33
Lorry parking spaces:	12
Cycle spaces:	12

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following risks and information.

Risks listed here are not exhaustive. For residual architectural risks, refer to D5 H&S Risk Register:**965-D5A-XX-XX-HS-A-0001**

DEMOLITION (PRE-CONSTRUCTION) & CONSTRUCTION:

D5A-A-0001 - Existing underground services
D5A-A-0002 - Site Contamination
D5A-A-0003 - Unknown voids and burried tanks
D5A-A-0004 - Historic Landfill
D5A-A-0005 - Public right of way adjacent site
D5A-A-0006 - Access to site during construction phase
D5A-A-0007 - UXO
D5A-A-0008 - Adjacent residential areas
D5A-A-0009 - Known or potenitlal coal mining risks
D5A-A-0012 - Pedestrian and vehicle segregation

For information relating to Use, Cleaning and Maintenance, refer to the above H&S Risk Register.

It is assumed that all works will be carried out by a competent contractor working, where appropriate, to an approved method statement.

Site Plan Key

1. Existing hard-standing.
2. Hard landscaping as Landscape Architect design.
3. Soft Landscaping as Landscape Architect design.
4. Tarmac surfacing to form access road.
5. External plant area.
6. Approved 2.4m high weldmesh fence, powder coated green RAL 6005. See Planning approval 20221218 for more detail.
7. Bin store enclosure.
8. 1m high retaining brick wall.
9. 2.5m high wall.
10. External client processing machinery shown indicatively.
11. Pedestrian gate.
12. Approved main access 2.4m high cantilever sliding gate. see Planning approval 20221218 for more detail.
13. Site level reduced to accomodate cullet bays.
14. 5m high concrete panels form acoustic barrier around cullet bay.
15. Sedum roof.
16. Cycle shelter.

Rev.	Date	Drawn	Checked	Description
C01	21.03.24	KP	MR	A3 - Issued for Planning
P08	19.03.24	KP	MR	S4 - Issued for Stage Approval
P07	28.02.24	KP	MR	Updated as per client comments
P06	23.02.24	KP	MR	Issued for review and comment following final site layout
P05	16.02.24	KP	MR	Further site plan revisions for review and comment
P04	08.02.24	KP	MR	Revised site plan after initial acoustic report.
P03	22.01.24	KP	MR	Schedule of Areas included
P02	19.01.24	KP	RD	Issued for review and comment
P01	23.08.23	MR		First Issue

D5 Architects LLP
71 - 77 Coventry Street
Birmingham
B5 5NH

t. 0121 633 4663
f. 0121 633 0540
info@d5architects.net
www.d5architects.net

client
Potters Industries

project
Stairfoot Glassworks
Wombwell Lane, Barnsley

drawing title
Proposed_Site_Plan

scale	date	author
1:1000@A1	**23/08/23**	**MR**

d5 job number / CAD file	CAD Format
965 / 965-D5A-00-XX-M3-A-0002	**Revit 2023**

suitability description	suit. code
Stage 3 Approved	**A3**

drawing number — project - originator - volume - level - type - role - number
965-D5A-XX-XX-DR-A-0003

revision
C01

Appendix 2
Junction Design Drawing



- 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 it's vehicle libraries.
- The locations of utilities apparatus, if shown, is reproduced from plans supplied to the consultant, although care has been taken when duplicating this information. These locations are approximate only and no guarantee can be given for their accuracy. It is the client's or it's appointed agent/contractors responsibility to verify the exact locations on site by hand dug trial holes or other appropriate means prior to mechanical excavation.
- Service connections are not shown but their presence should be anticipated.
- Reference to any third party equipment shown on this drawing was only relevant at the time the drawing was prepared.
- It is the client's responsibility to ensure that any equipment ordered meets the design.

Rev	Amendment	Drawn	Date	Checked
A	Visibility splays added	AA	Dec 23	KS

sanderson associates consulting engineers
Highways | Traffic | Transportation | Water
T 01924 844080 mail@sandersonassociates.co.uk
F 01924 844081 www.sandersonassociates.co.uk

Client

Potters–Ballotini Ltd

Project Title

Former Stairfoot Brickworks
Wombwell Lane
Barnsley

Drawing Title

Proposed Site Access Improvements

Scale As Shown	Drawn By CP
Drawing Size A2	Checked By KS
Date July 2022	Approved By KS

Drawing Number	Rev
300306-001	A

FILE REF:

Sanderson Associates Consulting Engineers is a trading name of Fairhurst Group LLP, a limited liability partnership, registered in Scotland. Registered No. SO307306.

Appendix 3

Swept Path Analysis Drawings

COPYRIGHT RAMBOLL UK LIMITED. ALL RIGHTS RESERVED. THIS DOCUMENT IS ISSUED FOR THE PARTY WHO COMMISSIONED IT AND FOR THE SPECIFIC PURPOSES CONNECTED WITH THE PROJECT ONLY. IT SHOULD NOT BE RELIED UPON BY ANY OTHER PARTY OR USED FOR ANY OTHER PURPOSE. RAMBOLL ACCEPTS NO RESPONSIBILITY OR LIABILITY WHICH MAY ARISE FROM RELIANCE OR USE OF THIS DOCUMENT OR THE DATA CONTAINED HEREIN BY ANY OTHER PARTY OR FOR ANY OTHER PURPOSE.

Notes

1. DO NOT SCALE FROM THIS DRAWING.
2. ALL DIMENSIONS ARE MILLIMETRES U.N.O.
3. ALL LEVELS ARE IN METRES ABOVE ORDNANCE DATUM U.N.O.
4. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS AND ENGINEERS DRAWINGS AND SPECIFICATIONS.
5. THIS DRAWING IS TO READ IN RELATION TO THE SUBJECT OF THE TITLE. OTHER INFORMATION IS CONSIDERED INDICATIVE ONLY.

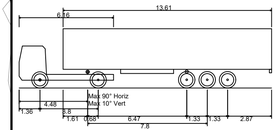
THE VEHICLE SWEPT PATH ANALYSIS SHOWN IS INDICATIVE ONLY AND SHOULD ONLY BE USED AS A GUIDELINE

KEY:

VEHICLE TRACKING:

- VEHICLE BODY SWEPT PATH
- VEHICLE BODY TRACKING
- VEHICLE WHEEL-BASE TRACKING
- FORWARD
- REVERSE

VEHICLE PROFILE:



FTA Design Articulated Vehicle (2016)

Overall Length	16.480m
Overall Width	2.550m
Overall Body Height	3.870m
Min Body Ground Clearance	0.515m
Max Track Width	2.470m
Lock to lock time	3.00s
Kerb to Kerb Turning Radius	6.600m

Rev	Description	Date	By	Chk	App
P01	PRELIMINARY ISSUE	06.03 2024	BB	TC	

FOR INFORMATION

STAIRFOOT GLASSWORKS

RAMBOLL

tel 020 7631 5291 london@ramboll.co.uk
www.ramboll.co.uk

ARTICULATED VEHICLE SWEPT PATH ANALYSIS ARRIVING

Project No:	Scale (@A1):	Drawn:	Date:
1620015371	NTS	BB	MAR 2024

Drawing No:	Suitability:	Rev:
SG-RAM-TR-00100		P01

COPYRIGHT RAMBOLL UK LIMITED. ALL RIGHTS RESERVED. THIS DOCUMENT IS ISSUED FOR THE PARTY WHO COMMISSIONED IT AND FOR THE SPECIFIC PURPOSES CONNECTED WITH THE PROJECT ONLY. IT SHOULD NOT BE RELIED UPON BY ANY OTHER PARTY OR USED FOR ANY OTHER PURPOSE. RAMBOLL ACCEPTS NO RESPONSIBILITY OR LIABILITY WHICH MAY ARISE FROM RELIANCE OR USE OF THIS DOCUMENT OR THE DATA CONTAINED HEREIN BY ANY OTHER PARTY OR FOR ANY OTHER PURPOSE.

Notes

1. DO NOT SCALE FROM THIS DRAWING.
2. ALL DIMENSIONS ARE MILLIMETRES U.N.O.
3. ALL LEVELS ARE IN METRES ABOVE ORDNANCE DATUM U.N.O.
4. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS AND ENGINEERS DRAWINGS AND SPECIFICATIONS.
5. THIS DRAWING IS TO READ IN RELATION TO THE SUBJECT OF THE TITLE. OTHER INFORMATION IS CONSIDERED INDICATIVE ONLY.

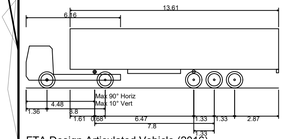
THE VEHICLE SWEPT PATH ANALYSIS SHOWN IS INDICATIVE ONLY AND SHOULD ONLY BE USED AS A GUIDELINE

KEY:

VEHICLE TRACKING:

- VEHICLE BODY SWEPT PATH
- VEHICLE BODY TRACKING
- VEHICLE WHEEL-BASE TRACKING
- FORWARD
- REVERSE

VEHICLE PROFILE:



FTA Design Articulated Vehicle (2016)

Overall Length	16.480m
Overall Width	2.550m
Overall Body Height	3.870m
Min Body Ground Clearance	0.515m
Max Track Width	2.470m
Lock to lock time	3.00s
Kerb to Kerb Turning Radius	6.600m

Rev	Description	Date	By	Chk	App
P01	PRELIMINARY ISSUE	06.03 2024	BB	TC	TC

FOR INFORMATION

STAIRFOOT GLASSWORKS

RAMBOLL

tel 020 7631 5291 london@ramboll.co.uk
www.ramboll.co.uk

ARTICULATED VEHICLE SWEPT PATH ANALYSIS DEPARTING

Project No:	Scale (@A1):	Drawn:	Date:
1620015371	NTS	BB	MAR 2024
Drawing No:		Suitability:	Rev:
SG-RAM-TR-00101			P01

COPYRIGHT RAMBOLL UK LIMITED. ALL RIGHTS RESERVED. THIS DOCUMENT IS ISSUED FOR THE PARTY WHO COMMISSIONED IT AND FOR THE SPECIFIC PURPOSES CONNECTED WITH THE PROJECT ONLY. IT SHOULD NOT BE RELIED UPON BY ANY OTHER PARTY OR USED FOR ANY OTHER PURPOSE. RAMBOLL ACCEPTS NO RESPONSIBILITY OR LIABILITY WHICH MAY ARISE FROM RELIANCE OR USE OF THIS DOCUMENT OR THE DATA CONTAINED HEREIN BY ANY OTHER PARTY OR FOR ANY OTHER PURPOSE.

Notes

1. DO NOT SCALE FROM THIS DRAWING.
2. ALL DIMENSIONS ARE MILLIMETRES U.N.O.
3. ALL LEVELS ARE IN METRES ABOVE ORDNANCE DATUM U.N.O.
4. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS AND ENGINEERS DRAWINGS AND SPECIFICATIONS.
5. THIS DRAWING IS TO READ IN RELATION TO THE SUBJECT OF THE TITLE. OTHER INFORMATION IS CONSIDERED INDICATIVE ONLY.

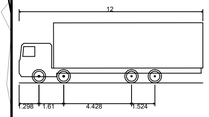
THE VEHICLE SWEPT PATH ANALYSIS SHOWN IS INDICATIVE ONLY AND SHOULD ONLY BE USED AS A GUIDELINE

KEY:

VEHICLE TRACKING:

- VEHICLE BODY SWEPT PATH
- VEHICLE BODY TRACKING
- VEHICLE WHEEL-BASE TRACKING
- FORWARD
- REVERSE

VEHICLE PROFILE:



Rigid Truck	
Overall Length	12.000m
Overall Width	2.500m
Overall Body Height	3.928m
Min Body Ground Clearance	0.412m
Track Width	2.471m
Lock to lock time	6.00s
Kerb to Kerb Turning Radius	11.900m

Rev	Description	Date	By Chk	App
P01	PRELIMINARY ISSUE	06.03 2024	BB TC	TC

FOR INFORMATION

STAIRFOOT GLASSWORKS

RAMBOLL

tel 020 7631 5291 london@ramboll.co.uk
www.ramboll.co.uk

RIGID VEHICLE SWEPT PATH ANALYSIS ARRIVING

Project No:	Scale (@A1):	Drawn:	Date:
1620015371	NTS	BB	MAR 2024

Drawing No:	Suitability:	Rev:
SG-RAM-TR-00107		P01

COPYRIGHT RAMBOLL UK LIMITED. ALL RIGHTS RESERVED. THIS DOCUMENT IS ISSUED FOR THE PARTY WHO COMMISSIONED IT AND FOR THE SPECIFITC PURPOSES CONNECTED WITH THE PROJECT ONLY. IT SHOULD NOT BE RELIED UPON BY ANY OTHER PARTY OR USED FOR ANY OTHER PURPOSE. RAMBOLL ACCEPTS NO RESPONSIBILITY OR LIABILITY WHICH MAY ARISE FROM RELIANCE OR USE OF THIS DOCUMENT OR THE DATA CONTAINED HEREIN BY ANY OTHER PARTY OR FOR ANY OTHER PURPOSE.

Notes

1. DO NOT SCALE FROM THIS DRAWING.
2. ALL DIMENSIONS ARE MILLIMETRES U.N.O.
3. ALL LEVELS ARE IN METRES ABOVE ORDNANCE DATUM U.N.O.
4. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS AND ENGINEERS DRAWINGS AND SPECIFICATIONS.
5. THIS DRAWING IS TO READ IN RELATION TO THE SUBJECT OF THE TITLE. OTHER INFORMATION IS CONSIDERED INDICATIVE ONLY.

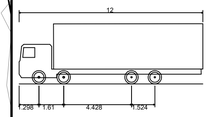
THE VEHICLE SWEPT PATH ANALYSIS SHOWN IS INDICATIVE ONLY AND SHOULD ONLY BE USED AS A GUIDELINE

KEY:

VEHICLE TRACKING:

- VEHICLE BODY SWEPT PATH
- VEHICLE BODY TRACKING
- VEHICLE WHEEL-BASE TRACKING
- FORWARD
- REVERSE

VEHICLE PROFILE:



Rigid Truck	
Overall Length	12.000m
Overall Width	2.500m
Overall Body Height	3.928m
Min Body Ground Clearance	0.412m
Track Width	2.471m
Lock to lock time	6.00s
Kerb to Kerb Turning Radius	11.900m

Rev	Description	Date	By	Chk	App
P01	PRELIMINARY ISSUE	06.03 2024	BB	TC	TC

FOR INFORMATION

STAIRFOOT GLASSWORKS

RAMBOLL

tel 020 7631 5291 london@ramboll.co.uk
www.ramboll.co.uk

RIGID VEHICLE SWEPT PATH ANALYSIS DEPARTING

Project No:	Scale (@A1):	Drawn:	Date:
1620015371	NTS	BB	MAR 2024

Drawing No:	Suitability:	Rev:
SG-RAM-TR-00108		P01

COPYRIGHT RAMBOLL UK LIMITED. ALL RIGHTS RESERVED. THIS DOCUMENT IS ISSUED FOR THE PARTY WHO COMMISSIONED IT AND FOR THE SPECIFITC PURPOSES CONNECTED WITH THE PROJECT ONLY. IT SHOULD NOT BE RELIED UPON BY ANY OTHER PARTY OR USED FOR ANY OTHER PURPOSE. RAMBOLL ACCEPTS NO RESPONSIBILITY OR LIABILITY WHICH MAY ARISE FROM RELIANCE OR USE OF THIS DOCUMENT OR THE DATA CONTAINED HEREIN BY ANY OTHER PARTY OR FOR ANY OTHER PURPOSE.

Notes

1. DO NOT SCALE FROM THIS DRAWING.
2. ALL DIMENSIONS ARE MILLIMETRES U.N.O.
3. ALL LEVELS ARE IN METRES ABOVE ORDNANCE DATUM U.N.O.
4. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS AND ENGINEERS DRAWINGS AND SPECIFICATIONS.
5. THIS DRAWING IS TO READ IN RELATION TO THE SUBJECT OF THE TITLE. OTHER INFORMATION IS CONSIDERED INDICATIVE ONLY.

THE VEHICLE SWEPT PATH ANALYSIS SHOWN IS INDICATIVE ONLY AND SHOULD ONLY BE USED AS A GUIDELINE

KEY:

VEHICLE TRACKING:

- VEHICLE BODY SWEPT PATH
- VEHICLE BODY TRACKING
- VEHICLE WHEEL-BASE TRACKING
- FORWARD
- REVERSE

VEHICLE PROFILE:



Aerial Platform/ Turntable Ladder/ Special Appliance	
Overall Length	12.000m
Overall Width	2.550m
Overall Body Height	4.500m
Min Body Ground Clearance	0.130m
Track Width	2.550m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	13.750m

Rev	Description	Date	By	Chk	App
P01	PRELIMINARY ISSUE	06.03 2024	BB	TC	TC

FOR INFORMATION

STAIRFOOT GLASSWORKS

RAMBOLL

tel 020 7631 5291 london@ramboll.co.uk
www.ramboll.co.uk

FIRE TENDER SWEPT PATH ANALYSIS ARRIVING

Project No:	Scale (@A1):	Drawn:	Date:
1620015371	NTS	BB	MAR 2024
Drawing No:		Suitability:	Rev:
SG-RAM-TR-00102			P01

COPYRIGHT RAMBOLL UK LIMITED. ALL RIGHTS RESERVED. THIS DOCUMENT IS ISSUED FOR THE PARTY WHO COMMISSIONED IT AND FOR THE SPECIFIC PURPOSE CONNECTED WITH THE PROJECT ONLY. IT SHOULD NOT BE RELIED UPON BY ANY OTHER PARTY OR USED FOR ANY OTHER PURPOSE. RAMBOLL ACCEPTS NO RESPONSIBILITY OR LIABILITY WHICH MAY ARISE FROM RELIANCE OR USE OF THIS DOCUMENT OR THE DATA CONTAINED HEREIN BY ANY OTHER PARTY OR FOR ANY OTHER PURPOSE.

Notes

1. DO NOT SCALE FROM THIS DRAWING.
2. ALL DIMENSIONS ARE MILLIMETRES U.N.O.
3. ALL LEVELS ARE IN METRES ABOVE ORDNANCE DATUM U.N.O.
4. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS AND ENGINEERS DRAWINGS AND SPECIFICATIONS.
5. THIS DRAWING IS TO READ IN RELATION TO THE SUBJECT OF THE TITLE. OTHER INFORMATION IS CONSIDERED INDICATIVE ONLY.

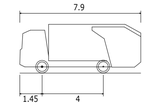
THE VEHICLE SWEPT PATH ANALYSIS SHOWN IS INDICATIVE ONLY AND SHOULD ONLY BE USED AS A GUIDELINE

KEY:

VEHICLE TRACKING:

- VEHICLE BODY SWEPT PATH
- VEHICLE BODY TRACKING
- VEHICLE WHEEL-BASE TRACKING
- FORWARD
- REVERSE

VEHICLE PROFILE:



DB32 REFUSE VEHICLE	
OVERALL LENGTH	7.900m
OVERALL WIDTH	2.400m
OVERALL BODY HEIGHT	3.183m
MIN BODY GROUND CLEARANCE	0.388m
MAX TRACK WIDTH	2.400m
LOCK TO LOCK TIME	6.00s
KERB TO KERB TURNING RADIUS	9.625m

Rev	Description	Date	By	Chk	App
P01	PRELIMINARY ISSUE	XX.09 2017	MES	JL	JL

FOR INFORMATION

STAIRFOOT GLASSWORKS

RAMBOLL

tel 020 7631 5291 london@ramboll.co.uk
www.ramboll.co.uk

REFUSE VEHICLE
SWEPT PATH ANALYSIS
DEPARTING

Project No:	Scale (@A1):	Drawn:	Date:
1620015371	NTS	BB	MAR 2024

Drawing No: SG-RAM-TR-00106

Rev: P01

26/03/2024 13:35:35



COPYRIGHT RAMBOLL UK LIMITED. ALL RIGHTS RESERVED. THIS DOCUMENT IS ISSUED FOR THE PARTY WHO COMMISSIONED IT AND FOR THE SPECIFIC PURPOSE CONNECTED WITH THE PROJECT ONLY. IT SHOULD NOT BE RELIED UPON BY ANY OTHER PARTY OR USED FOR ANY OTHER PURPOSE. RAMBOLL ACCEPTS NO RESPONSIBILITY OR LIABILITY WHICH MAY ARISE FROM RELIANCE OR USE OF THIS DOCUMENT OR THE DATA CONTAINED HEREIN BY ANY OTHER PARTY OR FOR ANY OTHER PURPOSE.

Notes

1. DO NOT SCALE FROM THIS DRAWING.
2. ALL DIMENSIONS ARE MILLIMETRES U.N.O.
3. ALL LEVELS ARE IN METRES ABOVE ORDNANCE DATUM U.N.O.
4. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS AND ENGINEERS DRAWINGS AND SPECIFICATIONS.
5. THIS DRAWING IS TO READ IN RELATION TO THE SUBJECT OF THE TITLE. OTHER INFORMATION IS CONSIDERED INDICATIVE ONLY.

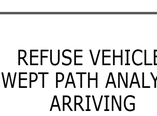
THE VEHICLE SWEPT PATH ANALYSIS SHOWN IS INDICATIVE ONLY AND SHOULD ONLY BE USED AS A GUIDELINE

KEY:

VEHICLE TRACKING:

- VEHICLE BODY SWEPT PATH
- VEHICLE BODY TRACKING
- VEHICLE WHEEL-BASE TRACKING
- FORWARD
- REVERSE

VEHICLE PROFILE:



DB32 REFUSE VEHICLE	
OVERALL LENGTH	7.900m
OVERALL WIDTH	2.400m
OVERALL BODY HEIGHT	3.183m
MIN BODY GROUND CLEARANCE	0.388m
MAX TRACK WIDTH	2.400m
LOCK TO LOCK TIME	6.00s
KERB TO KERB TURNING RADIUS	9.625m

Rev	Description	Date	By	Chk	App
P01	PRELIMINARY ISSUE	XX.09 2017	MES	JL	JL

FOR INFORMATION

STAIRFOOT GLASSWORKS

RAMBOLL

tel 020 7631 5291 london@ramboll.co.uk
www.ramboll.co.uk

REFUSE VEHICLE SWEPT PATH ANALYSIS ARRIVING

Project No:	Scale (@A1):	Drawn:	Date:
1620015371	NTS	BB	MAR 2024

Drawing No: RAM-XX-XX-DR-C-00105

Rev: P01

26/03/2024 13:36:39

COPYRIGHT RAMBOLL UK LIMITED. ALL RIGHTS RESERVED. THIS DOCUMENT IS ISSUED FOR THE PARTY WHO COMMISSIONED IT AND FOR THE SPECIFIC PURPOSES CONNECTED WITH THE PROJECT ONLY. IT SHOULD NOT BE RELIED UPON BY ANY OTHER PARTY OR USED FOR ANY OTHER PURPOSE. RAMBOLL ACCEPTS NO RESPONSIBILITY OR LIABILITY WHICH MAY ARISE FROM RELIANCE OR USE OF THIS DOCUMENT OR THE DATA CONTAINED HEREIN BY ANY OTHER PARTY OR FOR ANY OTHER PURPOSE.

Notes

1. DO NOT SCALE FROM THIS DRAWING.
2. ALL DIMENSIONS ARE MILLIMETRES U.N.O.
3. ALL LEVELS ARE IN METRES ABOVE ORDNANCE DATUM U.N.O.
4. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS AND ENGINEERS DRAWINGS AND SPECIFICATIONS.
5. THIS DRAWING IS TO READ IN RELATION TO THE SUBJECT OF THE TITLE. OTHER INFORMATION IS CONSIDERED INDICATIVE ONLY.

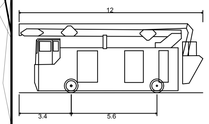
THE VEHICLE SWEPT PATH ANALYSIS SHOWN IS INDICATIVE ONLY AND SHOULD ONLY BE USED AS A GUIDELINE

KEY:

VEHICLE TRACKING:

- VEHICLE BODY SWEPT PATH
- VEHICLE BODY TRACKING
- VEHICLE WHEEL-BASE TRACKING
- FORWARD
- REVERSE

VEHICLE PROFILE:



Aerial Platform/ Turntable Ladder/ Special Appliance	
Overall Length	12.000m
Overall Width	2.550m
Overall Body Height	4.500m
Min Body Ground Clearance	0.130m
Track Width	2.550m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	13.750m

Rev	Description	Date	By Chk	App
P01	PRELIMINARY ISSUE	06.03 2024	BB TC	TC

FOR INFORMATION

STAIRFOOT GLASSWORKS

RAMBOLL

tel 020 7631 5291 london@ramboll.co.uk
www.ramboll.co.uk

FIRE TENDER SWEPT PATH ANALYSIS DEPARTING

Project No:	Scale (@A1):	Drawn:	Date:
1620015371	NTS	BB	MAR 2024
Drawing No:		Suitability:	Rev:
SG-RAM-TR-00103			P01

COPYRIGHT RAMBOLL UK LIMITED. ALL RIGHTS RESERVED. THIS DOCUMENT IS ISSUED FOR THE PARTY WHO COMMISSIONED IT AND FOR THE SPECIFIC PURPOSES CONNECTED WITH THE PROJECT ONLY. IT SHOULD NOT BE RELIED UPON BY ANY OTHER PARTY OR USED FOR ANY OTHER PURPOSE. RAMBOLL ACCEPTS NO RESPONSIBILITY OR LIABILITY WHICH MAY ARISE FROM RELIANCE OR USE OF THIS DOCUMENT OR THE DATA CONTAINED HEREIN BY ANY OTHER PARTY OR FOR ANY OTHER PURPOSE.

Notes

1. DO NOT SCALE FROM THIS DRAWING.
2. ALL DIMENSIONS ARE MILLIMETRES U.N.O.
3. ALL LEVELS ARE IN METRES ABOVE ORDNANCE DATUM U.N.O.
4. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS AND ENGINEERS DRAWINGS AND SPECIFICATIONS.
5. THIS DRAWING IS TO READ IN RELATION TO THE SUBJECT OF THE TITLE. OTHER INFORMATION IS CONSIDERED INDICATIVE ONLY.

THE VEHICLE SWEPT PATH ANALYSIS SHOWN IS INDICATIVE ONLY AND SHOULD ONLY BE USED AS A GUIDELINE

KEY:

VEHICLE TRACKING:

- VEHICLE BODY SWEPT PATH
- VEHICLE BODY TRACKING
- VEHICLE WHEEL-BASE TRACKING
- FORWARD
- REVERSE

VEHICLE PROFILE:



Standard Design Vehicle (SDV)	
Overall Length	4.800m
Overall Width	2.000m
Overall Body Height	1.950m
Min Body Ground Clearance	0.100m
Track Width	2.000m
Lock to lock time	4.00s
Wall to Wall Turning Radius	6.000m

Rev	Description	Date	By Chk	App
P01	PRELIMINARY ISSUE	06.03 2024	BB TC	TC

FOR INFORMATION

STAIRFOOT GLASSWORKS

RAMBOLL

tel 020 7631 5291 london@ramboll.co.uk
www.ramboll.co.uk

CAR SWEPT PATH ANALYSIS

Project No:	Scale (@A1):	Drawn:	Date:
1620015371	NTS	BB	MAR 2024
Drawing No:	Suitability:	Rev:	
SG-RAM-TR-00109		P01	