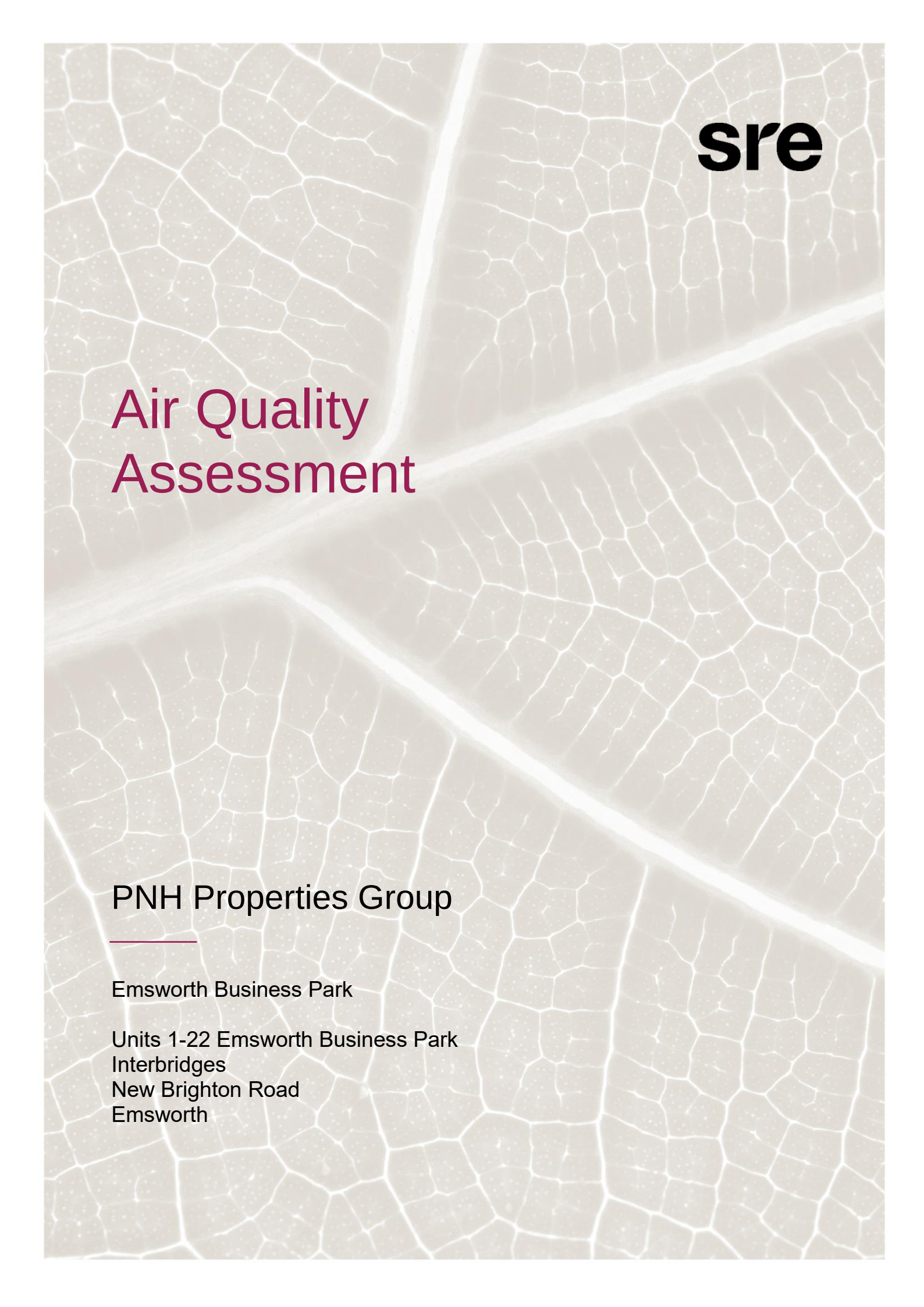


The background of the entire page is a close-up, high-magnification photograph of a leaf's surface. It shows a complex network of veins in a light beige or cream color, creating a honeycomb-like pattern against a slightly darker, muted greenish-beige background. The veins are prominent and run in various directions, some parallel and others branching out.

sre

Air Quality Assessment

PNH Properties Group

Emsworth Business Park

Units 1-22 Emsworth Business Park
Interbridges
New Brighton Road
Emsworth

Version	Revision	Date	Author	Reviewer	Project Manager
1	A	14.08.2024	Jiale Li	Lamya Salem	Adam Tucker
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Executive Summary

This Air Quality Assessment (AQA) has been performed by SRE Ltd on behalf of PNH Properties (The Client) to address the Havant Borough Local Plan planning policy requirements for the new developments at Emsworth Business Park, Interbridges (the Proposed Development).

The Proposed Development at Emsworth Business Park, Interbridges includes an employment development with associated access, parking, yards, landscaping and substation.

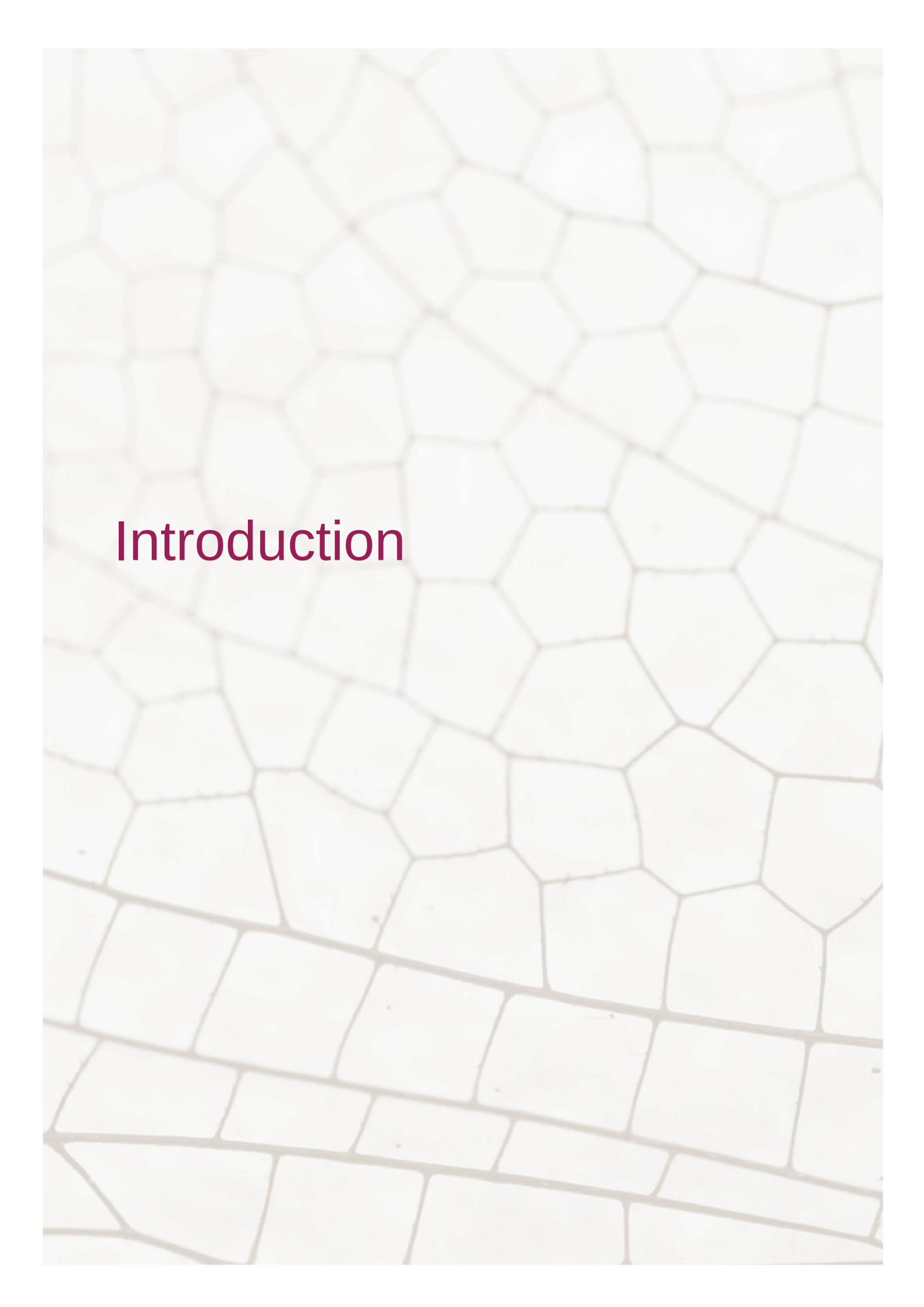
The Proposed Development is not located within an Air Quality Management Area (AQMA), and there are no AQMAs within the Havant Borough Council area. The baseline air quality assessment reviewed local air quality by compiling data from monitoring conducted by Havant Borough Council (HBC). The assessment concludes that the current local air quality is well below the national air quality objective for NO₂ and is generally considered to be good.

This report has tackled external pollution concerns to assess the suitability of the site for the proposal with regards to local air quality. Internal pollution concerns have been identified in the IAQP section, with essential mitigation measures outlined to mitigate potential hazards to indoor air quality for future occupants.

Following the assessment, construction and operational phase impacts on the local air quality have been considered. Key mitigation measures have been addressed relating to the increase traffic, odour, and aerosols from the proposed scheme.

The proposed energy strategy does not incorporate gas-fired or solid-/oil-fuelled heating systems and therefore there are no associated Nitrogen Oxides (NO_x) emissions during the operation of the building. No emergency or backup generators have been proposed. The proposal for cycle storage and electric vehicle (EV) charging points also promotes sustainable transport to and from the site.

In summary, the proposed location is considered suitable for the proposed scheme in terms of local air quality. The anticipated future impact of the Proposed Development on local air quality is expected to be minimal, as there are no Nitrogen Oxides (NO_x) emissions anticipated during the operation of the building, coupled with low level transport emissions. Suggestions have been made in this report to reduce the potential health hazards for the local area and future building occupants.

The background of the slide is a microscopic image of plant tissue, likely an endodermis. It shows a honeycomb-like pattern of cells. The cells in the upper portion are roughly hexagonal and have thin walls. The cells in the lower portion are more rectangular and have very thick, dark-stained corners, which are characteristic of cornuata cells. The word "Introduction" is written in a dark red, serif font, centered horizontally and positioned in the middle of the image.

Introduction

1.0 Introduction

The World Health Organisation (WHO) defines air pollution as ‘the contamination of indoor or outdoor areas by biological, chemical, or physical particles that modify the natural characteristics of the atmosphere’. Depending on the level of exposure, this pollution can provoke a wide range of health effects with the most dangerous forms of air pollution being Particulate Matter (PM_{2.5}/PM₁₀) and Nitrogen Oxides (NO₂/NO_x) due to their high concentration. In the UK, power generators and transport are the largest human-made sources of PM with Nitrogen Oxides, representing a human-made pollutant released through combustion processes such as heating, power generation and vehicle/ship engines¹.

This Air Quality Assessment (AQA) has been performed by SRE Ltd on behalf of PNH Properties (The Client) to address the Havant Borough Local Plan planning policy requirements for the new developments at Emsworth Business Park, Interbridges (the Proposed Development).

The new development will be built on the current greenfield, so no major demolition will be required on site, minimizing the potential pollutants during construction. The proposed site is bordered by the A27 to the north, the railway to the south, the B2148 New Brighton Road to the west, and the greenfield to the east. Figure 1 shows the location of the proposed site.



Figure 1 - Location of the Proposed Development (Google Earth)

The proposed site is well connected by public transport. Emsworth railway station is within a 5-minute walk, and several buses stops nearby facilitate transfers for local residents. The

¹ [Demystifying Air Pollution in London: Full Report, January 2018](#)

area is primarily residential, with a few industrial warehouses to the west and south of the site. The large green fields surrounding the area contribute greenery to the locality and help mitigate potential pollutants during construction.

The Proposed Development at Emsworth Business Park, Interbridges includes an employment development with associated access, parking, yards, landscaping and substation. Figure 2 shows the site plan of the Proposed Development.

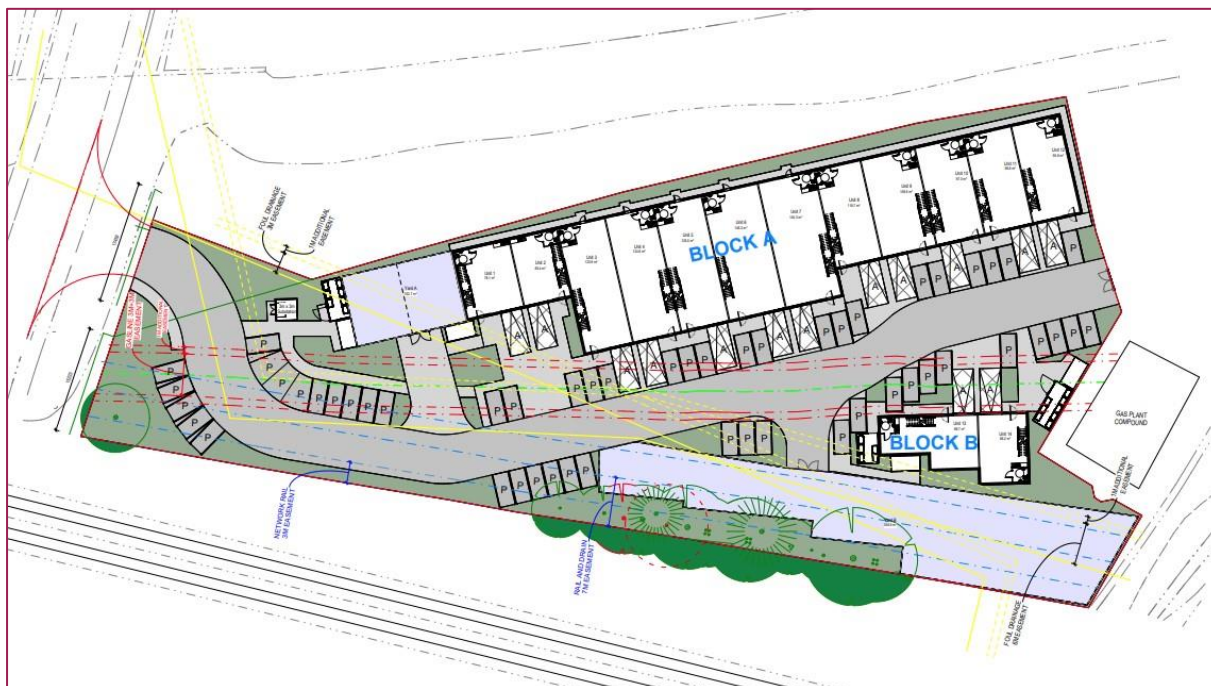


Figure 2 – Proposed Site Plan of the Proposed Development (Hyphen)

1.1 Air Quality Objectives

There is growing evidence that air pollution, even when experienced at very low levels, is damaging to human health. Table 1 below represents the current national air quality objectives and targets for the protection of human health from the national DEFRA Air Quality Limits².

Pollutant	Applies	Objective	Concentration measured as	Date to be achieved by (and maintained thereafter)
Particles (PM ₁₀)	UK	50 µg/m ³ not to be exceeded more than 35 times a year	24 hours mean	31 December 2004
	UK	40 µg/m ³	annual mean	31 December 2004
Particles (PM _{2.5})	UK (except Scotland)	20 µg/m ³	annual mean	1 January 2020

² [DEFRA National Air Quality and European Directive Limit and Target Values for the Protection of Human Health](#)

Pollutant	Applies	Objective	Concentration measured as	Date to be achieved by (and maintained thereafter)
Exposure Reduction	UK urban areas	Target of 15% reduction in concentrations at urban background		Between 2010 and 2020
Particles (PM _{2.5}) (Population Exposure Reduction Target)	England	Target of 35% reduction in population exposure compared with the average population exposure baseline period (2016 – 2018)	population exposure reduction	31 December 2040
Particles (PM _{2.5}) (Annual Mean Concentration Target)	England	10 µg/m ³ not to be exceeded at any relevant monitoring station	annual mean	31 December 2040
Nitrogen Dioxide	UK	200 µg/m ³ not to be exceeded more than 18 times a year	1 hour mean	31 December 2005
	UK	40 µg/m ³	annual mean	31 December 2005

Table 1 - National Air Quality Objectives and Targets for the protection of human health (UK AIR, 2020)

The WHO Air quality guidelines (AQGs) present recommended levels for common air pollutants, as shown in Table 2.

Pollutant	Averaging Time	2005 AQGs	2021 AQGs
PM _{2.5} , µg/m ³	Annual	10	5
	24-hour	25	15
PM ₁₀ , µg/m ³	Annual	20	15
	24-hour	50	45
NO ₂ , µg/m ³	Annual	40	10
	24-hour	-	25

Table 2 - Recommended AQG levels (Last modified 2023)

1.2 Planning Context

The Havant Borough Local Plan³ is made up of the Core Strategy (2011) and the Site Allocations Plan (2014). These two plans are part of the development plan and form the starting point for decisions on planning applications. The Core Strategy sets out the strategic direction and broad distribution of development for the Borough, including strategic sites and areas for development and protection. The Allocations Plan identifies sites for specific uses

³ [Havant Borough Local Plan: Core Strategy and Site Allocations](#)

including housing, employment, retail, recreation and green infrastructure up to 2026. Legislation for air quality in Havant includes Clean Air Act 1993⁴ and Environment Act 1995⁵.

Table 3 below summarises the policy context of the relevant policy.

Planning Policy	Policy Summary
Havant Borough Core Strategy	Development that may cause pollution of water, air or soil or pollution through noise, smell, smoke, fumes, gases, steam, dust, vibration, light, heat, electromagnetic radiation and other pollutants will only be permitted where all of the following relevant criteria can be met: 1. The health and safety of existing and future users of the site, or nearby occupiers and residents is not put at risk. 2. National air quality standards or objectives would not be breached. 3. The water environment would not be detrimentally affected. 4. It would not lead to an unacceptable deterioration in the quality or potential yield of coastal, surface and ground water resources. 5. External lighting is of the minimum level of illumination and duration required for security and operational purposes. 6. External lighting would not interfere with safe navigation in either Chichester or Langstone Harbours and other coastal locations.
Clean Air Act 1993	The Clean Air Act 1993 is the UK legislation that controls domestic and industrial smoke. The objective of the act is to control the emissions of smoke, dust and grit into the atmosphere. The act introduced a wide range of new regulations such as those which control smoke emissions, the height of chimneys and those relating to the content and composition of motor fuels. The act has helped the UK to meet air quality standards for sulphur dioxide and particulate set by EU Directive 80/779/EEC.
Environment Act 2021	The Environment Act 2021 is a UK law that sets out the framework for environmental governance, waste and resource efficiency, air quality, water, nature and biodiversity. The Environment Act will deliver: • Long-term targets to improve air quality, biodiversity, water, and waste reduction and resource efficiency • A target on ambient PM2.5 concentrations, the most harmful pollutant to human health • A target to halt the decline of nature by 2030 • Environmental Improvement Plans, including interim targets • A cycle of environmental monitoring and reporting • Environmental Principles embedded in domestic policy making • Office for Environmental Protection to uphold environmental law

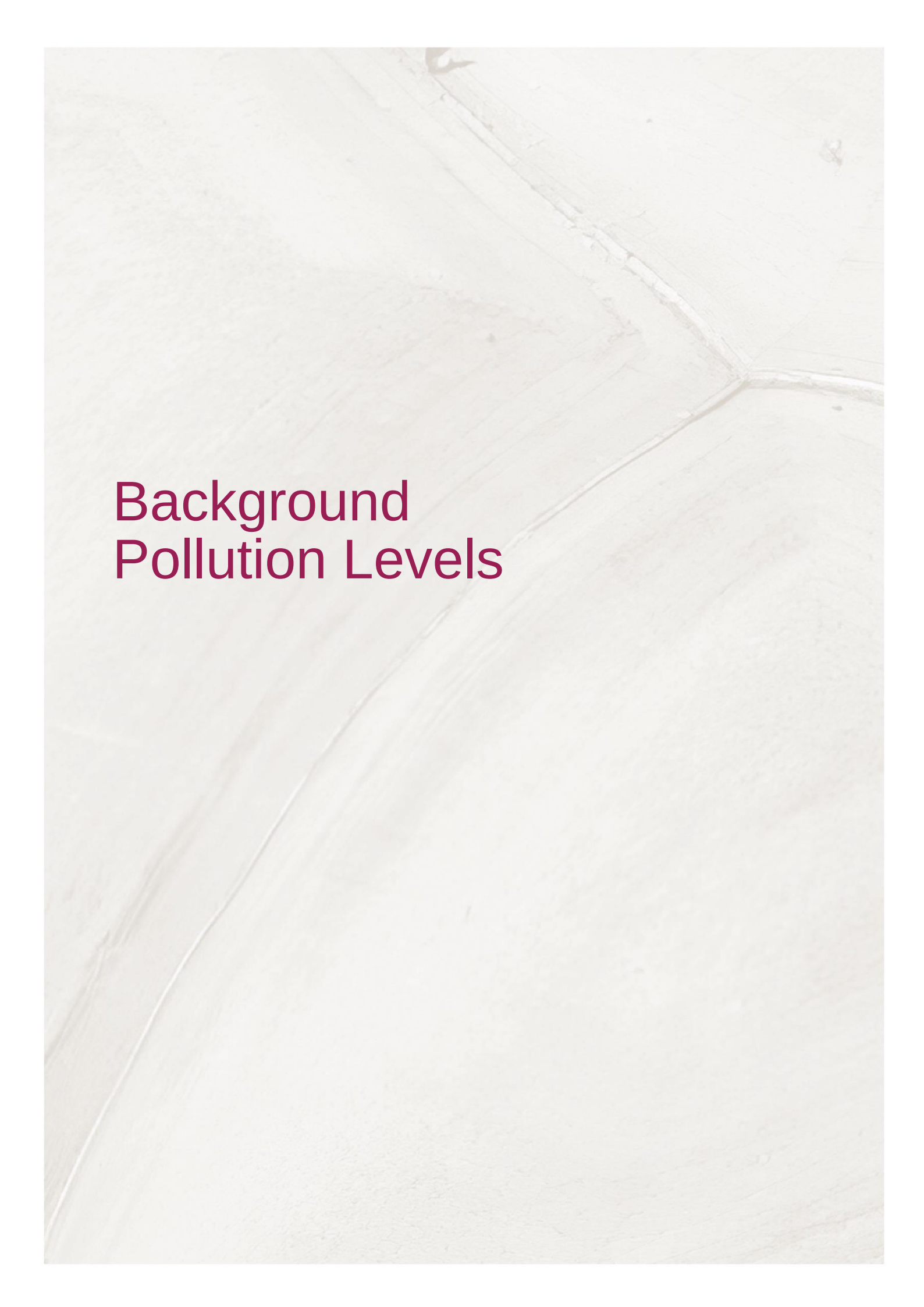
Table 3 - Relevant Planning policy summary

⁴ [Clean Air Act 1993](#)

⁵ [The Environment Act 2021](#)

1.3 Building Regulations Approved Document F: Ventilation

The shell and core structure of the Proposed Development is being designed to be naturally ventilated and will adhere to the ventilation requirements outlined in Building Regulations Approved Document F, where applicable. Extract fans will be installed in each WC to prevent the buildup of indoor air pollutants and to minimize the infiltration of external pollutants into the building.

An aerial photograph of a dry, cracked landscape. A road runs diagonally from the top right towards the bottom left. A small, light-colored building is visible in the upper right corner. The ground is light brown and shows extensive cracking and erosion patterns.

Background Pollution Levels

2.0 Background Pollution Levels

2.1 Air Quality Management Area (AQMA)

Where significant levels of gaseous pollutants such as Nitrogen Oxides are identified in the outdoor air, as identified in areas located within an Air Quality Management Area (AQMA), the use of appropriate gas phase filtration in the building ventilation system should be considered. Developments where a portion of the site is within a local authority AQMA are automatically considered to be in a high pollution location.

The Proposed Development is not located within any AQMA declared by the Havant Borough Council (HBC), indicating that the general air quality in the area is good (Figure 3). NO₂ concentrations do not exceed the air quality objective limits at locations of relevant exposure, which has resulted in no AQMAs being declared within HBC.

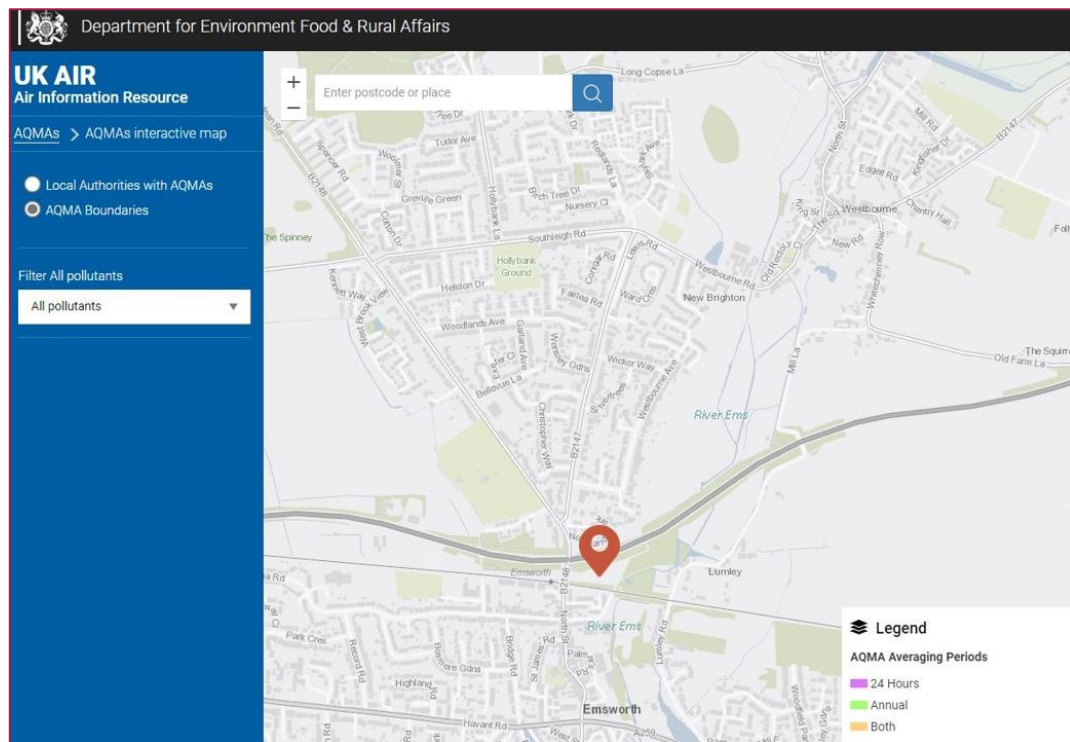


Figure 3 – AQMA Interactive Map of the Proposed Development (DEFRA)

In the local area of Emsworth, background concentrations of Particulate Matter (PM₁₀/PM_{2.5}) and Nitrogen Dioxide (NO₂) are shown to be within the national air quality objectives listed in Table 1 above, including the area in which the Proposed Development is located (as evidenced in Figure 4). The annual mean concentration for Nitrogen Dioxide was 11.61 µg/m³, NO_x (as NO₂) was 15.93 µg/m³, PM₁₀ was 12.06 µg/m³, and PM_{2.5} was 7.16 µg/m³. Background pollutant concentrations are selected from the year of 2022 in order to illustrate pollution data during a year of normalised emissions rates.

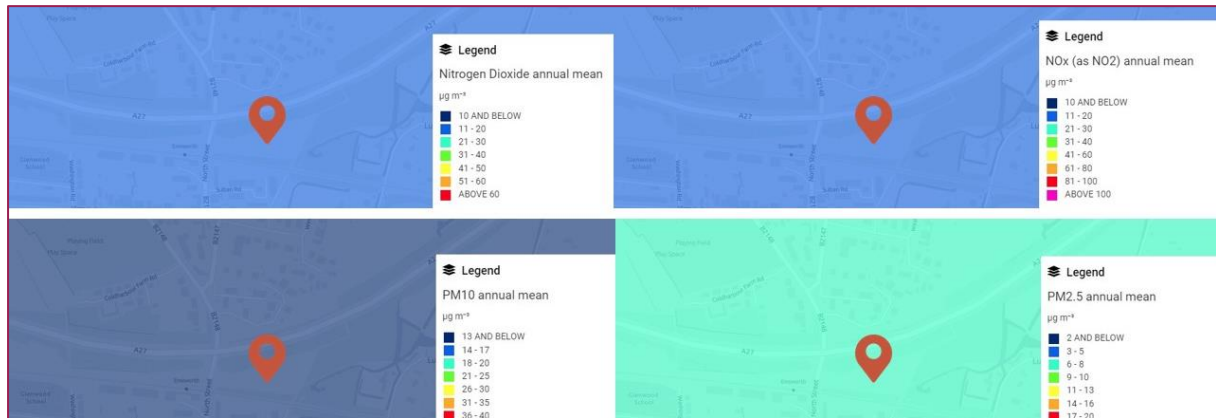


Figure 4 - 2022 Background Concentrations of NO_x, NO₂, PM₁₀, PM_{2.5} (DEFRA UK)

2.2 High Pollution Location

In accordance with the BREEAM manual, under Pollution Section 02 (Pol 02) Local air quality:

‘Any developments where any portion of the site is within a local authority AQMA are automatically considered to be in a high pollution location. For developments that are wholly outside of an AQMA, the following levels define high pollution locations:

- NO_x > 15 µg/m³ averaged over a year
- PM₁₀ > 10 µg/m³ averaged over a year’

The proposed development is not located within an AQMA. However, the NO_x level is 15.93 µg/m³, slightly exceeding the 15 µg/m³ threshold, and the PM₁₀ level also exceeds 10 µg/m³. Consequently, the site can be considered a high pollution location. Therefore, appropriate mitigation measures should be considered during the design of the development to reduce health risks for the building users.

2.3 External Sources

2.3.1 Roads

The proposed site is bordered by the A27 to the north, the railway to the south, the B2148 New Brighton Road to the west, and greenfield land to the east. According to the site plan, the main entrance for Emsworth Business Park will be accessed from B2148 New Brighton Road.

Figure 5 below represents the impact of solely roadside emissions on the area’s air quality, highlighting the influence of roads on local air quality (2022). It can be seen that the nearby roads (e.g., A27 and B2148) do not contribute significantly to roadside emissions. The closest source of roadside pollutants is the A259, which is further away from the proposed site. Therefore, the site is experiencing an insignificant level of roadside pollutants.

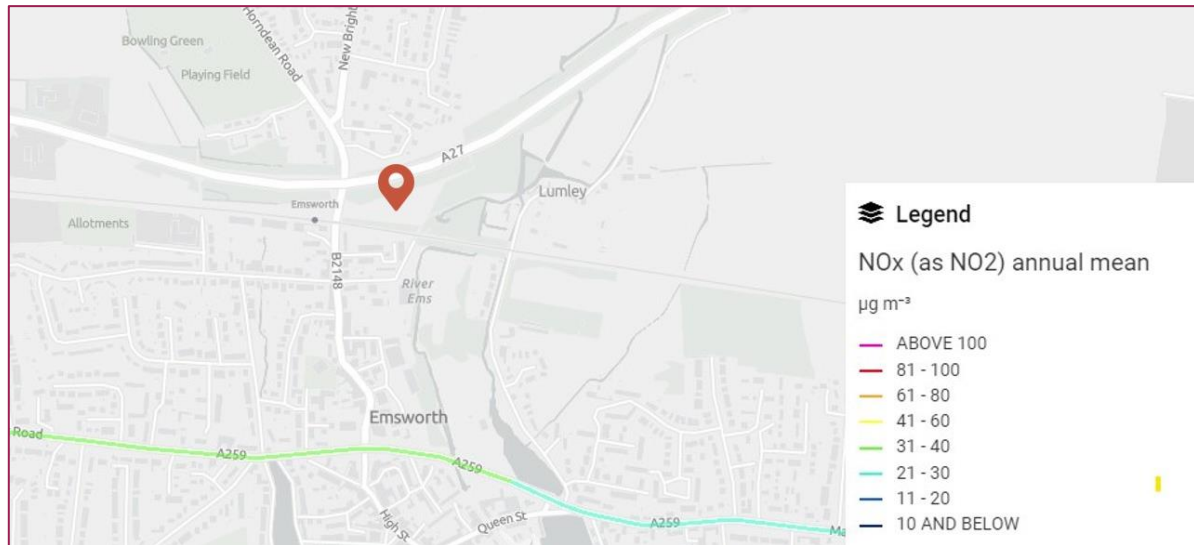


Figure 5 - Roadside Concentrations NO_x Near the Proposed Development (DEFRA UK, 2022)

2.3.2 Wind

Wind plays a vital role in the dispersion of pollutant particles across long distances dependent on the speed and direction of the prevailing wind. Whilst assisting in the removal of pollutants from certain areas, it simultaneously acts to worsen air quality in other areas to which the air mass is transported.

The wind rose below (Figure 6) shows how many hours per year the wind blows from the indicated direction for the area. Air pollution produced from the site is likely to be blown from West (W) and South-West (SW) to North-East (NE). To the northeast of the site lies a large area of green fields and trees, with only a few individual dwellings. Therefore, air pollution produced during construction and operation of the Proposed Development is unlikely to significantly impact human health.

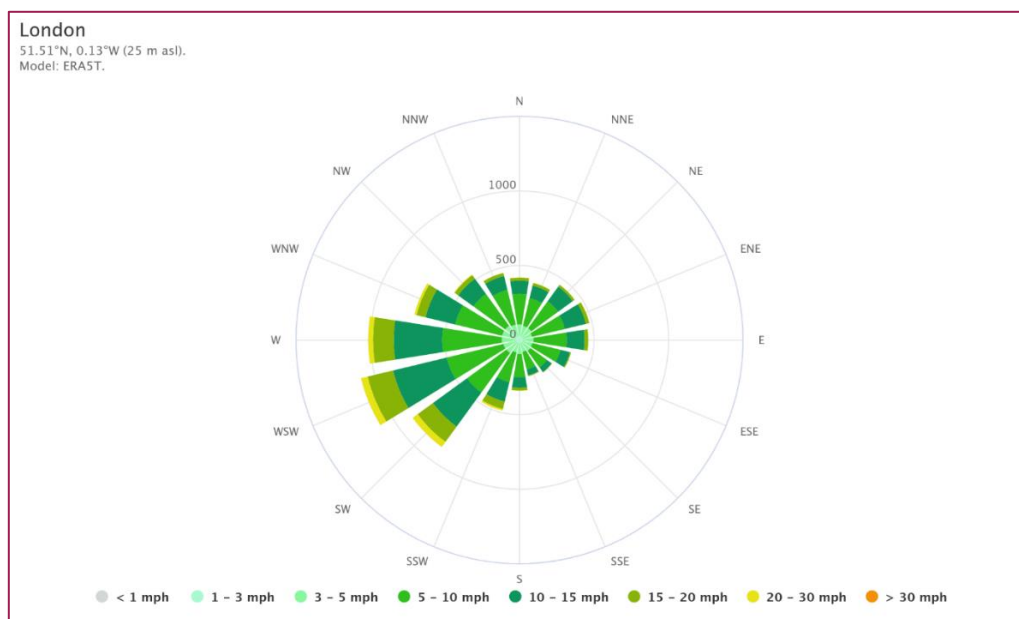


Figure 6 - Wind rose of the Proposed Development (Meteoblue)

The background of the entire page is a light-colored, marbled paper with a complex, organic pattern of veins and swirls in shades of cream, beige, and light brown.

Air Quality Assessment

3.0 Air Quality Assessment

An AQA has been performed for the Proposed Development, in accordance with the guidance requirements of EPUK/IAQM 2017⁶. There is an initial step in the consultation process aimed at determining the necessity of an air quality modelling, which is further discussed in section 1.0.

3.1 Requirement for a Detailed Dispersion Air Quality Assessment

Professional judgement will be required to determine whether an air quality assessment is necessary, taking into account the following considerations:

- the impacts of existing sources in the local area on the development; and
- the impacts of the development on the local area.

Appendix A has outlined the criteria for a two-stage approach to assess the impact of development on the local area. The first stage is intended to screen out smaller development and/or developments where impacts can be considered to have insignificant effects. The second stage relates to specific details regarding the Proposed Development and the likelihood of air quality impacts. If none of the criteria are met, then there should be no requirement to carry out an air quality assessment.

The Proposed Development met the criteria under (A – more than 1,000 m² of floor space for all other uses) and (B – the development has more than 10 parking spaces), and consequently should be considered to Stage 2.

3.2 Transport Emissions

3.2.1 Demolition and Construction Traffic Impacts

Since the proposed development will be built on existing green fields, the impact of demolition on traffic will be minimal. The potential impacts as a result of construction traffic generated by the Proposed Development have taken into consideration the volume and composition of generated traffic, the anticipated duration of the construction period and any mitigation measures that are considered likely to be implemented.

The expected trip generation during the construction phase is not currently available. However, based on the proposed works, it is unlikely that the number of construction vehicles using the local road network will exceed the thresholds of 100 Heavy Duty Vehicle (HDV) average annual daily traffic (AADT) in Appendix A. The impact of the construction traffic emissions on local air quality is expected to be negligible.

3.2.2 Operational Road Traffic Impacts

The entire proposed site includes 50 car parking spaces, 14 loading ramp spaces, and 4 cycle shelters. The transport assessment provided by Bellamy Roberts Ltd estimates the proposed trip generation to be 324 two-way vehicle trips for Light Goods Vehicles (LGVs) and 25 for Medium & Large Goods Vehicles (OGVs) per day, based on TRICS results. This figure does

⁶ [Land-Use Planning & Development Control: Planning for Air Quality \(January 2017\)](#)

not exceed the threshold of more than 500 AADT for LDVs or 100 AADT for HDVs as outlined in Appendix A.

As a result, the overall impact from construction and operational traffic emissions for the proposed development on local air quality is expected to be negligible. Since none of the criteria in Stage 2 of Appendix A are met, there is no need to conduct an air quality assessment for the development's impact on the local area, and the effects can be considered insignificant.

3.3 Building Emissions

The Proposed Development is undergoing a 'Shell and Core' assessment, focusing on implementing natural ventilation for the shell and core structure. Space heating and hot water will be provided by air source heat pumps, with no gas boiler included. Additionally, solar panels will be installed on the roof to generate on-site renewable energy.

By implementing this strategy, there will be no associated NO_x emissions from the heating and hot water systems. The potential impact of pollutants on local air quality during the operation of the development is considered negligible.

3.4 Baseline Air Quality

The baseline air quality assessment has reviewed the local air quality by compiling the results of monitoring carried out by Havant Borough Council (HBC), as detailed in the Air Quality Annual Status Report⁷). HBC did not take automatic (continuous) monitoring during 2021 and 2022. HBC undertook non-automatic monitoring of NO₂ at 23 sites during 2021 and 2022.

There were no exceedances of the annual mean NO₂ objective at any HBC monitoring locations in 2021 and 2022. The maximum recorded concentration in 2021 was 29.9 µg/m³ at site 19C Langstone Road (Woodbury); the maximum recorded concentration in 2022 was 29.0 µg/m³ at site 28 Park Road South. No recorded annual mean concentrations exceeded the indicative threshold value of 60 µg/m³ in 2021 or 2022, which suggests an exceedance of the 1-hour mean objective is also unlikely.

Between 2018 and 2022, the only monitoring location that showed an increase in annual mean NO₂ concentration was site W10 Compton Court (0.9 µg/m³ increase), though the annual mean NO₂ concentration remained well below the objective. Between 2021 and 2022, the NO₂ concentrations at most sites remained very similar, with most sites recording a slight reduction.

Sites 19C, 28, and W10 are all located far from Emsworth, indicating that the current air quality at the proposed location is good.

3.5 Conclusion

Based on the review of local air quality monitoring data, it is concluded that the current local air quality is well below the national air quality objective for NO₂, with a slight downward trend observed between 2021 and 2022 at most sites. Therefore, the current local air quality is considered to be good.

⁷ [Havant Borough Council Combined 2022 and 2023 Air Quality Annual Status Report \(ASR\), June 2023](#)

The predicted future air quality impacts due to the establishment of the Proposed Development, including transport and building emissions, are discussed in section 3.2 and section 3.3.

The transport impacts during the construction of the Proposed Development are currently unknown but are unlikely to exceed the threshold of 100 HDV AADT. The operational traffic impacts have been analysed based on the trip generation data provided by the external transport consultant. This analysis indicates that the Proposed Development's trip generation does not surpass the threshold of 500 AADT for LDVs or 100 AADT for HDVs, suggesting that the operational traffic emissions are expected to have a negligible impact on local air quality.

The Proposed Development will implement an all-electric, low-to-zero carbon energy strategy, ensuring that no harmful NO_x emissions are released.

Overall, the future air quality impacts of the Proposed Development are considered negligible, making the Proposed Development suitable for the site.



Indoor Air Quality Plan

4.0 Internal Pollutants

4.1 Finishes and Furnishings

New buildings are often associated with high concentrations of VOCs; emitted mainly from paints, carpets, materials, and furniture. These emissions are highest when the building has just finished construction and reduce over time.

VOCs present a risk to the health and comfort of occupants if their air concentrations exceed the threshold known to cause adverse effects. Some are toxic and can impact children, particularly those in vulnerable groups (such as those who suffer from asthma and allergies). The most likely health impact from VOCs is short-term irritation of the eyes, nose, skin, and respiratory tract. Odour generated by VOCs can also be a concern to the occupants. Common indoor VOCs include formaldehyde, decane, butoxyethanol, isopentane, limonene, styrene, xylenes, perchloroethylene, methylene chloride and toluene. These products are often used within modern construction and could impact the indoor air quality of the building.

The following are various implementable methods to mitigate this risk:

- The internal finishing products specified should meet the emission limits, testing requirements and any additional requirements listed in Appendix B.
- Product containers should be disposed of safely and purchased only as much as is necessary to reduce waste and the unnecessary release of VOCs.
- Work should be sequenced to ensure that absorbent surfaces (e.g., carpets) are not installed until the work resulting in emitting high levels of VOCs (e.g., coating) is completed.
- HVAC equipment and ductwork should be protected from dust and other pollutants during installation and when near to other construction or installation works.
- Ventilation systems and ductwork should be checked and cleaned prior to and during commissioning, so that pollutants are not released into the building during operation.
- Sources of formaldehyde should be identified and removed where possible, as it is one of the few pollutants that can be readily measured. If removal is not feasible, exposure can be reduced by applying a sealant on all exposed surfaces of panelling and other furnishings.

Since the proposed development is a shell and core self-storage scheme, there are therefore minimal amounts of internal finishes materials which would present a VOC risk. For the internal finishes materials that are installed, the above methodology must be implemented.

4.2 Cleaning and Storerooms

VOCs and other pollutants present within cleaning products may evaporate, contaminating the surrounding air. This can be controlled by ensuring that any cleaning products are stored in areas with high levels of ventilation to facilitate adequate dilution and removal. All storerooms should have mechanical extract to promote dilution. Natural cleaning solutions should be used wherever possible, and workers/building users should always exercise caution and wear protective equipment when handling harsh chemical cleaning solutions.

4.3 HVAC Equipment

To ensure the Proposed Development does not impact the air quality of the local area, a gas-based system has been ruled unfeasible. Instead, a low to zero carbon strategy has been decided upon. This strategy includes the use of air-to-air heat pumps for space heating and cooling.

Natural ventilation will be provided for the shell and core structure. Future tenants will implement their own ventilation systems based on their fit-out plans. However, the use of electric-powered mechanical ventilation is highly recommended to ensure no harmful emissions affect local air quality in the future. It is recommended that extract fans be installed in the WCs, cleaner's store, and kitchen areas to effectively remove odours and pollutants, ensuring that the internal spaces are regularly refreshed and maintain good air quality.

Through this all-electric, low-to-zero carbon energy strategy the Proposed Development will not release any harmful NO_x emissions.

4.4 Tobacco

Smoking is not permitted in any indoor spaces. Therefore, the risk of indoor air pollution from tobacco (for example Benzene, a known human carcinogen) is low.

4.5 People

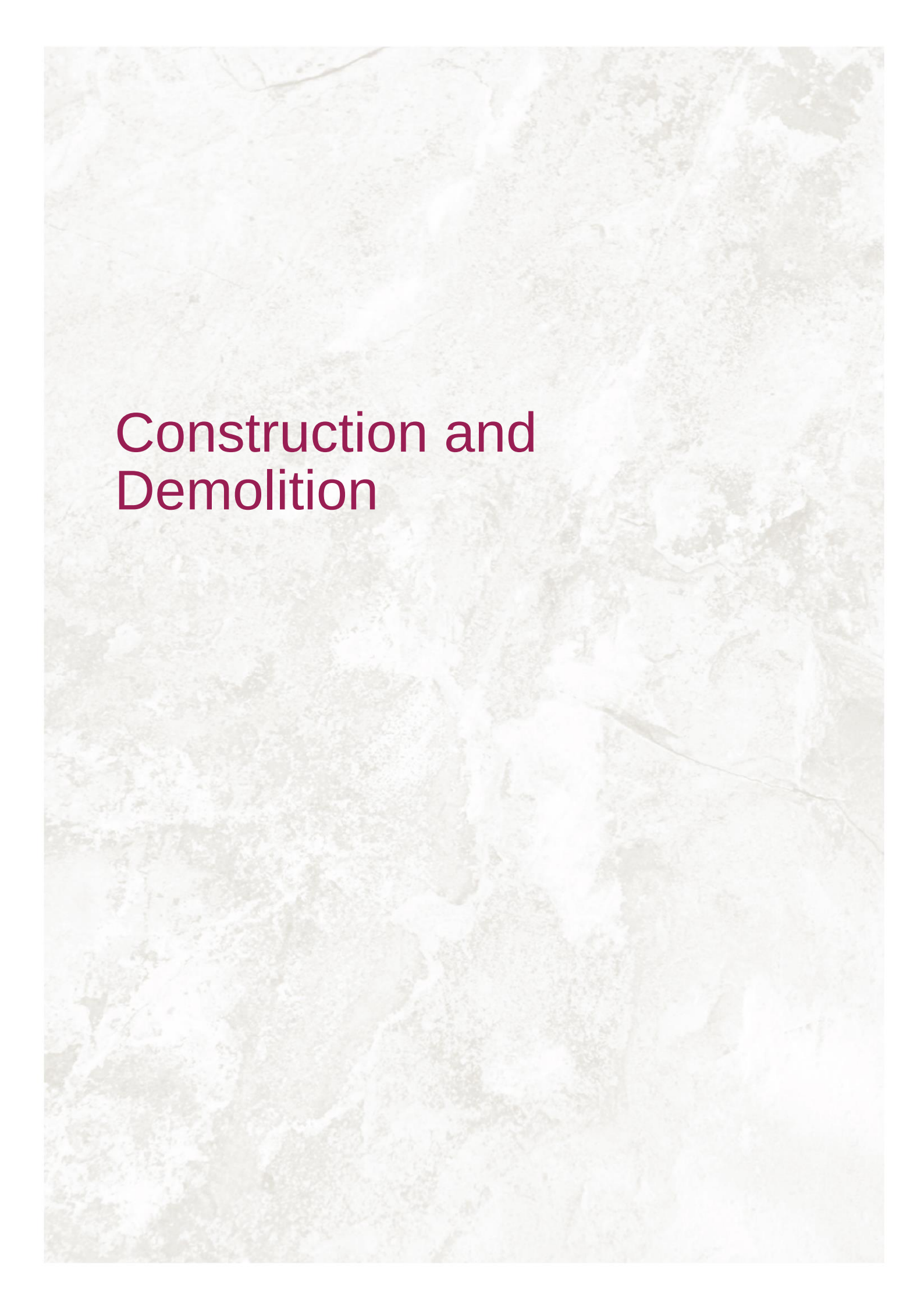
People, as users of the building, will generate moisture, CO₂ and odours which contribute to the indoor air quality of the development. High CO₂ concentrations often indicate high odour levels and poor indoor air quality. Indoor CO₂ levels can be impacted by several factors including the number of occupants, their activity levels, time spent in a room, and the ventilation rate.

Considering the Proposed Development is a shell and core self-storage scheme, the amount of building users is considerable low compared to that of a commercial retail or residential building.

4.6 Removal of Contaminant Sources Summary

There are various internal pollutants that may impact the indoor air quality of the Proposed Development. Non-VOC emitting products and low VOCs construction products should be selected to minimise the contaminant sources.

The Proposed Development is designed for natural ventilation; however, during the fit-out stage, it is recommended that future tenants install mechanical ventilation with appropriate filters. Intakes and airflow pathways should be designed and installed in accordance with building policy in all spaces to minimize the build-up of air pollutants. Additionally, HVAC equipment should be protected when in the vicinity of construction and installation works, and ventilation systems should be checked and cleaned before and during commissioning to prevent the release of pollutants into the building during operation.

The background of the entire page is a light-colored, marbled paper with a complex, organic pattern of veins and swirls in shades of cream, beige, and light brown. The texture appears slightly grainy and aged.

Construction and Demolition

5.0 Construction and Demolition

Air pollutants can result from on-site dust-generating activities such as the breaking-up of materials, the clearing of the existing site, the exhaust of diesel-powered vehicles, as well as both static and non-road mobile machinery. Vehicles and people accessing and travelling across the site can also generate dust.

It is therefore important that the creation or release of any air pollutants is minimised as far as possible, so that the air pollution levels are not significantly elevated as a result of the construction works carried out on the Proposed Development.

5.1 Dust Risk Assessment

As the Proposed Development is currently in the very early design stage and lacks sufficient information to conduct a Dust Risk Assessment (DRA), it is recommended that a DRA be carried out at a later stage. This assessment will evaluate the risk of dust impacts and identify suitable site-specific mitigation measures.

As per the Institute of Air Quality Management's (IAQM) Guidance⁸, the risk of dust impacts is categorized separately for demolition, earthworks, construction and track-out. Figure 7 summarises the steps the steps to produce a Dust Risk Assessment.

No large-scale demolition is required for the site preparation, as the site is currently vacant. Therefore, the primary dust impacts will be from earthworks, construction, and vehicle track-out. Given that the proposed development is an industrial warehouse, the anticipated dust risks from these activities are expected to be low. However, it is advisable to implement standard dust control measures to manage any potential impacts during these phases.

⁸ [Guidance on the assessment of dust from demolition and construction V2.2, January 2024](#)

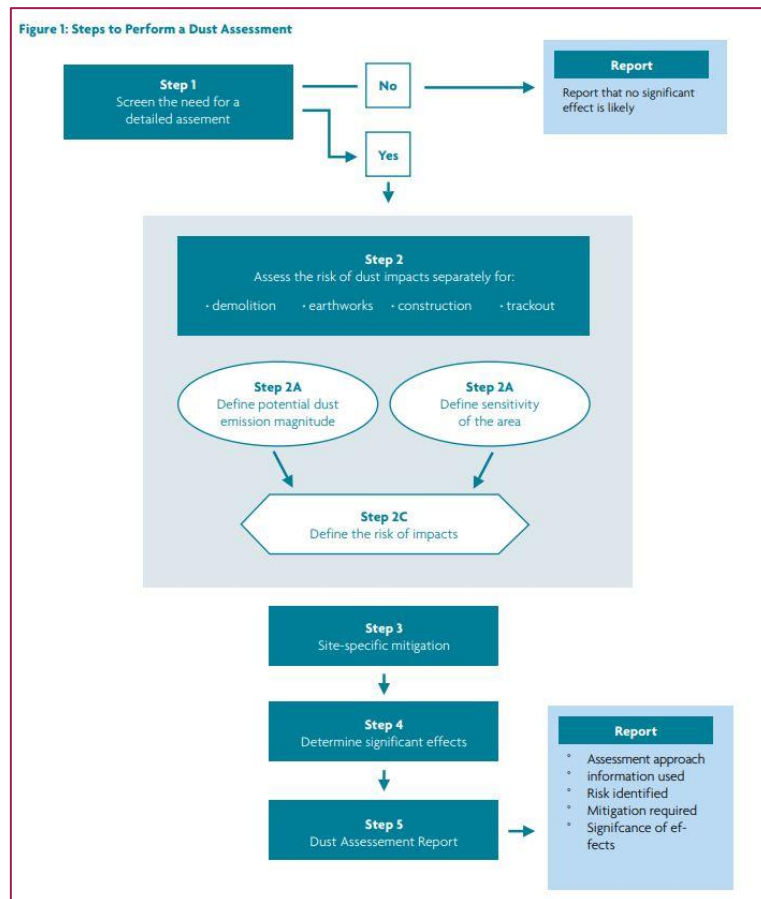


Figure 7 - Summary of Dust Risk Assessment process (Guidance on the assessment of dust from demolition and construction V2.2)

5.2 General Dust Emissions Mitigation Measures

Mitigation measures are set out in The Control of Dust and Emissions from Construction and Demolition Supplementary Planning Guidance⁹. A brief summary of the general measures is outlined below, addressing key measures for dust control. Appendix D details the general mitigation measures for earthworks, construction and track-out.

5.2.1 Site management and maintenance

Responsible site management is imperative during any site clearance and the following construction phase, which require stakeholder engagement and regular site inspections. The application site must also be prepared through an effective site layout and implementation of green infrastructure while also maintaining runoff, cleaning, and soiling, and effectively dealing with spillages.

5.2.2 Vehicle emissions

The construction site will involve the use of vehicles and machinery which can significantly contribute to local air pollution. Therefore, all mobile vehicles should comply with the latest low emissivity targets, vehicle idling should be discouraged, and deliveries are recommended to

⁹ [The control of dust and emissions during construction and demolition SPG, July 2014](#)

be managed by a Construction Logistic Plan (CLP) to effectively deliver and remove items from the site.

Workers and future building users of the Proposed Development and public areas will be encouraged to use public transport and/or cycle routes as alternatives to single-occupancy cars. Plant items for the site will be from renewable or battery sources, where possible, to reduce the higher levels of Particulate Matter and NO_x emitted from petrol- or diesel-powered equipment.

5.2.3 Operations

Cutting, grinding, and sawing should be limited on-site and managed by dampening with water to reduce excessive dust generation. If mobile crushing and concrete bashing occur on-site, Local borough must be notified, and best practice procedures should be followed. Skips, chutes, and conveyors should be covered to limit dust escaping. Plant items for the site will be operated from renewable or battery sources, where possible, to reduce the higher levels of PM and NO_x emitted from petrol- or diesel-powered equipment.

5.2.4 Waste

Bonfires are forbidden, and the recycling or reuse of materials will be encouraged. A Pre-Demolition Waste Audit for the Proposed Development should be undertaken so that the amount of site clearance (no demolition) and construction waste can be assessed and monitored.

5.3 Site monitoring

It is important to continually monitor the site to manage the generation of Particulate Matter and Nitrogen Oxides during construction. The Proposed Development should take regular energy and water meter readings during the construction phases and transport will be recorded for all deliveries to and from the site. Quantities and types of waste should also be monitored.

5.4 Non-road mobile machinery

Non-Road Mobile Machinery (NRMM) is a broad category which includes:

- mobile machines
- transportable industrial equipment
- vehicles which are fitted with an internal combustion engine that are not intended for transporting goods or passengers on roads

NRMM, particularly from the construction sector, is a significant contributor to local air pollution. As construction will likely begin for the Proposed Development after 1st September 2020, any non-road mobile machinery (NRMM) used on site will be required to meet Stage IIIB of the EU Directive 97/968/EC as a minimum. This can be achieved by reorganising the NRMM fleet, replacing equipment to meet the policy (where there are non-compliant NRMM), retrofitting abatement technologies or replacing engines. Using the Considerate Constructors Scheme will assist in monitoring compliance with the NRMM policy.

5.5 Emergency Generators

No backup or emergency generators have been proposed for the development. Traditional backup generators, which often rely on fossil fuels, will have a negative impact on the environment. The proposal aligns with sustainability goals and reduces carbon emissions.

The background of the slide is a microscopic image of plant tissue, showing a network of polygonal cells with thick, brownish cell walls. The cells are arranged in a somewhat regular pattern, with some larger cells and some smaller ones. The overall color is a light beige or cream. The word "Summary" is written in a dark red, serif font, positioned in the upper left quadrant of the slide.

Summary

6.0 Summary

This Air Quality Assessment (AQA) has addressed the Havant Borough Local Plan planning policy requirements for the Proposed Development at Unit 1-22 Emsworth Business Park in Interbridges.

The Proposed Development is not located within an Air Quality Management Area (AQMA), and there are no AQMAs within the Havant Borough Council area. The baseline air quality assessment reviewed local air quality by compiling data from monitoring conducted by Havant Borough Council (HBC). The assessment concludes that the current local air quality is well below the national air quality objective for NO₂ and is generally considered to be good.

The proposed energy strategy excludes gas-fired and solid-/oil-fuelled heating systems, so there will be no associated Nitrogen Oxides (NO_x) emissions during the building's operation. Additionally, the inclusion of cycle storage and electric vehicle (EV) charging points supports sustainable transport to the site. Based on the trip generation data provided by the external transport consultant, the transport impacts from both the construction and operational phases of the Proposed Development are considered negligible. As a result, the future air quality impacts are expected to be minimal, making the Proposed Development suitable for the site.

This report has outlined key mitigation measures to minimize negative impacts on external air quality during both the construction and operation phases of the Proposed Development. Construction activities will follow the Control of Dust and Emissions during Construction and Demolition SPG, which serves as a best practice guidance document, to reduce air pollution from these activities.

In summary, the Proposed Development has addressed the Havant Borough Local Plan planning policy requirements regarding air quality and is thought to have a limited impact on future local air quality. By following the guidance within this report during the construction and operation phases, the Proposed Development will have minimal impact on local air quality. Moreover, by implementing the recommended active measures from this report, the indoor air quality will be improved, leading to a greater satisfaction among building users.

Appendix

Appendix A – Air Quality Assessment Criteria

Stage 1 criteria: Criteria to proceed to stage 2

Criteria to Proceed to Stage 2

If any of the following apply:

- 10 or more residential units or a site area of more than 0.5ha
- more than 1,000 m² of floor space for all other uses or a site area greater than 1ha

Coupled with any of the following:

- the development has more than 10 parking spaces
- the development will have a centralised energy facility or other centralised combustion process

Indicative criteria for requiring an air quality assessment

The development will:	Indicative Criteria to Proceed to an Air Quality Assessment
1. Cause a significant change in Light Duty Vehicle (LDV) traffic flows on local roads with relevant receptors. (LDV = cars and small vans <3.5t gross vehicle weight).	A change of LDV flows of: - more than 100 AADT within or adjacent to an AQMA - more than 500 AADT elsewhere.
2. Cause a significant change in Heavy Duty Vehicle (HDV) flows on local roads with relevant receptors. (HDV = goods vehicles + buses >3.5t gross vehicle weight).	A change of HDV flows of: - more than 25 AADT within or adjacent to an AQMA - more than 100 AADT elsewhere.
3. Realign roads, i.e. changing the proximity of receptors to traffic lanes.	Where the change is 5m or more and the road is within an AQMA.
4. Introduce a new junction or remove an existing junction near to relevant receptors.	Applies to junctions that cause traffic to significantly change vehicle accelerate/decelerate, e.g. traffic lights, or roundabouts.
5. Introduce or change a bus station.	Where bus flows will change by: - more than 25 AADT within or adjacent to an AQMA - more than 100 AADT elsewhere.
6. Have an underground car park with extraction system.	The ventilation extract for the car park will be within 20 m of a relevant receptor. Coupled with the car park having more than 100 movements per day (total in and out).

The development will:	Indicative Criteria to Proceed to an Air Quality Assessment
7. Have one or more substantial combustion processes, where there is a risk of impacts at relevant receptors. NB. this includes combustion plant associated with standby emergency generators (typically associated with centralised energy centres) and shipping.	Typically, any combustion plant where the single or combined NO_x emission rate is less than 5 mg/sec is unlikely to give rise to impacts, provided that the emissions are released from a vent or stack in a location and at a height that provides adequate dispersion. In situations where the emissions are released close to buildings with relevant receptors, or where the dispersion of the plume may be adversely affected by the size and/or height of adjacent buildings (including situations where the stack height is lower than the receptor) then consideration will need to be given to potential impacts at much lower emission rates. Conversely, where existing Nitrogen Dioxide concentrations are low, and where the dispersion conditions are favourable, a much higher emission rate may be acceptable.

Appendix B – TVOCs Emission Criteria by Product Type

Emission limit			Testing
Formaldehyde	Total volatile organic compounds (TVOC)	Category 1A and 1B carcinogens	Requirement
Interior paints and coatings			
$\leq 0.06 \text{ mg/m}^3$	$\leq 1.0 \text{ mg/m}^3$	$\leq 0.001 \text{ mg/m}^3$	EN 16402 / ISO 16000-9 / CEN/TS 16516 / CDPH Standard Method v1.1
Additional requirements Meet TVOC content limits. Paints used in wet areas (e.g. bathrooms, kitchens, utility rooms) should protect against mould.			
Wood-based products (including wood flooring)			
$\leq 0.06 \text{ mg/m}^3$ (Non-MDF) $\leq 0.08 \text{ mg/m}^3$ (MDF)	$\leq 1.0 \text{ mg/m}^3$	$\leq 0.001 \text{ mg/m}^3$	ISO 16000-9 / CEN/TS 16516 / CDPH Standard Method v1.1/ EN 717-1 (formaldehyde emissions only)
Flooring materials (including floor levelling compounds and resin flooring)			
$\leq 0.06 \text{ mg/m}^3$	$\leq 1.0 \text{ mg/m}^3$	$\leq 0.001 \text{ mg/m}^3$	ISO 10580/ ISO 16000-9/ CEN/TS 16516 / CDPH Standard Method v1.1
Ceiling, wall and acoustic and thermal insulation materials			
$\leq 0.06 \text{ mg/m}^3$	$\leq 1.0 \text{ mg/m}^3$	$\leq 0.001 \text{ mg/m}^3$	N/A
Interior adhesives and sealants (including flooring adhesives)			
$\leq 0.06 \text{ mg/m}^3$	$\leq 1.0 \text{ mg/m}^3$	$\leq 0.001 \text{ mg/m}^3$	EN 13999 (Parts 1-4) / ISO 16000-9 / CEN/TS 16516 / CDPH Standard Method v1.1

* Compliance with emission limits shall be demonstrated after 28 days in an emission test chamber or earlier as stipulated by the relevant testing requirements standard.

Appendix C – TRICS Database

Calculation Reference: AUDIT-200601-241127-1109

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
Category : F - WAREHOUSING (COMMERCIAL)
TOTAL VEHICLES

Selected regions and areas:

02	SOUTH EAST	
	BO BEDFORD	1 days
	HC HAMPSHIRE	1 days
03	SOUTH WEST	
	TB TORBAY	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	NY NORTH YORKSHIRE	1 days

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

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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: 190 to 3665 (units: sqm)
 Range Selected by User: 190 to 6000 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/16 to 19/06/23

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:

Monday 2 days
 Thursday 1 days
 Friday 1 days

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

Selected survey types:

Manual count 4 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:

Edge of Town 4

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

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 1 days - Selected
 Servicing vehicles Excluded 3 days - Selected

Secondary Filtering selection:**Use Class:**

n/a 1 days
 B8 3 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:

5,001 to 10,000	3 days
10,001 to 15,000	1 days

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

Population within 5 miles:

75,001 to 100,000	1 days
125,001 to 250,000	3 days

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

Car ownership within 5 miles:

1.1 to 1.5	4 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	4 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	4 days
-----------------	--------

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

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LIST OF SITES relevant to selection parameters

1	BO-02-F-01 CAMBRIDGE ROAD BEDFORD	DRINKS WHOLESALER	BEDFORD
	Edge of Town Industrial Zone Total Gross floor area:	3500 sqm	
	Survey date: THURSDAY	15/10/20	Survey Type: MANUAL
2	HC-02-F-03 WARSASH ROAD PARK GATE	PPE DISTRIBUTION	HAMPSHIRE
	Edge of Town Industrial Zone Total Gross floor area:	3665 sqm	
	Survey date: MONDAY	27/09/21	Survey Type: MANUAL
3	NY-02-F-01 GRIMBALD CRAG CLOSE KNARESBOROUGH	REMOVALS SERVICE	NORTH YORKSHIRE
	Edge of Town Industrial Zone Total Gross floor area:	1750 sqm	
	Survey date: MONDAY	19/06/23	Survey Type: MANUAL
4	TB-02-F-01 ALDERS WAY PAIGNTON	OPTICS WAREHOUSE	TORBAY
	Edge of Town Industrial Zone Total Gross floor area:	190 sqm	
	Survey date: FRIDAY	29/03/19	Survey Type: MANUAL

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.

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TRIP RATE for Land Use 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)

TOTAL VEHICLES

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	1845	0.217	2	1845	0.027	2	1845	0.244
06:00 - 07:00	2	1845	0.190	2	1845	0.108	2	1845	0.298
07:00 - 08:00	4	2276	0.154	4	2276	0.132	4	2276	0.286
08:00 - 09:00	4	2276	0.099	4	2276	0.066	4	2276	0.165
09:00 - 10:00	4	2276	0.143	4	2276	0.033	4	2276	0.176
10:00 - 11:00	4	2276	0.275	4	2276	0.187	4	2276	0.462
11:00 - 12:00	4	2276	0.187	4	2276	0.220	4	2276	0.407
12:00 - 13:00	4	2276	0.187	4	2276	0.209	4	2276	0.396
13:00 - 14:00	4	2276	0.297	4	2276	0.154	4	2276	0.451
14:00 - 15:00	4	2276	0.220	4	2276	0.340	4	2276	0.560
15:00 - 16:00	4	2276	0.132	4	2276	0.417	4	2276	0.549
16:00 - 17:00	4	2276	0.099	4	2276	0.154	4	2276	0.253
17:00 - 18:00	4	2276	0.044	4	2276	0.198	4	2276	0.242
18:00 - 19:00	4	2276	0.022	4	2276	0.022	4	2276	0.044
19:00 - 20:00	2	1845	0.000	2	1845	0.027	2	1845	0.027
20:00 - 21:00	2	1845	0.000	2	1845	0.000	2	1845	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.266			2.294			4.560

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:	190 - 3665 (units: sqm)
Survey date range:	01/01/16 - 19/06/23
Number of weekdays (Monday-Friday):	4
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.

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Licence No: 200601

TRIP RATE for Land Use 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)

TAXIS

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	1845	0.000	2	1845	0.000	2	1845	0.000
06:00 - 07:00	2	1845	0.000	2	1845	0.000	2	1845	0.000
07:00 - 08:00	4	2276	0.000	4	2276	0.000	4	2276	0.000
08:00 - 09:00	4	2276	0.011	4	2276	0.011	4	2276	0.022
09:00 - 10:00	4	2276	0.000	4	2276	0.000	4	2276	0.000
10:00 - 11:00	4	2276	0.000	4	2276	0.000	4	2276	0.000
11:00 - 12:00	4	2276	0.000	4	2276	0.000	4	2276	0.000
12:00 - 13:00	4	2276	0.000	4	2276	0.000	4	2276	0.000
13:00 - 14:00	4	2276	0.000	4	2276	0.000	4	2276	0.000
14:00 - 15:00	4	2276	0.000	4	2276	0.000	4	2276	0.000
15:00 - 16:00	4	2276	0.000	4	2276	0.000	4	2276	0.000
16:00 - 17:00	4	2276	0.000	4	2276	0.000	4	2276	0.000
17:00 - 18:00	4	2276	0.000	4	2276	0.000	4	2276	0.000
18:00 - 19:00	4	2276	0.000	4	2276	0.000	4	2276	0.000
19:00 - 20:00	2	1845	0.000	2	1845	0.000	2	1845	0.000
20:00 - 21:00	2	1845	0.000	2	1845	0.000	2	1845	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.011			0.011			0.022

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.

BELLAMY ROBERTS WESTERN LANE ODIHAM

Licence No: 200601

TRIP RATE for Land Use 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)

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	1845	0.027	2	1845	0.027	2	1845	0.054
06:00 - 07:00	2	1845	0.000	2	1845	0.054	2	1845	0.054
07:00 - 08:00	4	2276	0.022	4	2276	0.121	4	2276	0.143
08:00 - 09:00	4	2276	0.011	4	2276	0.044	4	2276	0.055
09:00 - 10:00	4	2276	0.044	4	2276	0.011	4	2276	0.055
10:00 - 11:00	4	2276	0.099	4	2276	0.066	4	2276	0.165
11:00 - 12:00	4	2276	0.055	4	2276	0.077	4	2276	0.132
12:00 - 13:00	4	2276	0.044	4	2276	0.066	4	2276	0.110
13:00 - 14:00	4	2276	0.066	4	2276	0.033	4	2276	0.099
14:00 - 15:00	4	2276	0.055	4	2276	0.033	4	2276	0.088
15:00 - 16:00	4	2276	0.033	4	2276	0.022	4	2276	0.055
16:00 - 17:00	4	2276	0.044	4	2276	0.033	4	2276	0.077
17:00 - 18:00	4	2276	0.011	4	2276	0.011	4	2276	0.022
18:00 - 19:00	4	2276	0.011	4	2276	0.000	4	2276	0.011
19:00 - 20:00	2	1845	0.000	2	1845	0.000	2	1845	0.000
20:00 - 21:00	2	1845	0.000	2	1845	0.000	2	1845	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.522			0.598			1.120

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.

BELLAMY ROBERTS WESTERN LANE ODIHAM

Licence No: 200601

TRIP RATE for Land Use 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)

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	1845	0.000	2	1845	0.000	2	1845	0.000
06:00 - 07:00	2	1845	0.054	2	1845	0.000	2	1845	0.054
07:00 - 08:00	4	2276	0.000	4	2276	0.000	4	2276	0.000
08:00 - 09:00	4	2276	0.011	4	2276	0.000	4	2276	0.011
09:00 - 10:00	4	2276	0.000	4	2276	0.011	4	2276	0.011
10:00 - 11:00	4	2276	0.011	4	2276	0.000	4	2276	0.011
11:00 - 12:00	4	2276	0.011	4	2276	0.011	4	2276	0.022
12:00 - 13:00	4	2276	0.011	4	2276	0.000	4	2276	0.011
13:00 - 14:00	4	2276	0.000	4	2276	0.000	4	2276	0.000
14:00 - 15:00	4	2276	0.011	4	2276	0.011	4	2276	0.022
15:00 - 16:00	4	2276	0.000	4	2276	0.044	4	2276	0.044
16:00 - 17:00	4	2276	0.000	4	2276	0.011	4	2276	0.011
17:00 - 18:00	4	2276	0.000	4	2276	0.000	4	2276	0.000
18:00 - 19:00	4	2276	0.000	4	2276	0.000	4	2276	0.000
19:00 - 20:00	2	1845	0.000	2	1845	0.000	2	1845	0.000
20:00 - 21:00	2	1845	0.000	2	1845	0.000	2	1845	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.109			0.088			0.197

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.

BELLAMY ROBERTS WESTERN LANE ODIHAM

Licence No: 200601

TRIP RATE for Land Use 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)

CARS

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	1845	0.190	2	1845	0.000	2	1845	0.190
06:00 - 07:00	2	1845	0.136	2	1845	0.000	2	1845	0.136
07:00 - 08:00	4	2276	0.099	4	2276	0.000	4	2276	0.099
08:00 - 09:00	4	2276	0.066	4	2276	0.000	4	2276	0.066
09:00 - 10:00	4	2276	0.077	4	2276	0.022	4	2276	0.099
10:00 - 11:00	4	2276	0.110	4	2276	0.066	4	2276	0.176
11:00 - 12:00	4	2276	0.099	4	2276	0.088	4	2276	0.187
12:00 - 13:00	4	2276	0.099	4	2276	0.110	4	2276	0.209
13:00 - 14:00	4	2276	0.165	4	2276	0.077	4	2276	0.242
14:00 - 15:00	4	2276	0.132	4	2276	0.264	4	2276	0.396
15:00 - 16:00	4	2276	0.066	4	2276	0.329	4	2276	0.395
16:00 - 17:00	4	2276	0.033	4	2276	0.110	4	2276	0.143
17:00 - 18:00	4	2276	0.022	4	2276	0.165	4	2276	0.187
18:00 - 19:00	4	2276	0.000	4	2276	0.022	4	2276	0.022
19:00 - 20:00	2	1845	0.000	2	1845	0.000	2	1845	0.000
20:00 - 21:00	2	1845	0.000	2	1845	0.000	2	1845	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.294			1.253			2.547

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.

BELLAMY ROBERTS WESTERN LANE ODIHAM

Licence No: 200601

TRIP RATE for Land Use 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)

LGVS

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	1845	0.000	2	1845	0.000	2	1845	0.000
06:00 - 07:00	2	1845	0.054	2	1845	0.054	2	1845	0.108
07:00 - 08:00	4	2276	0.022	4	2276	0.011	4	2276	0.033
08:00 - 09:00	4	2276	0.011	4	2276	0.011	4	2276	0.022
09:00 - 10:00	4	2276	0.022	4	2276	0.000	4	2276	0.022
10:00 - 11:00	4	2276	0.044	4	2276	0.055	4	2276	0.099
11:00 - 12:00	4	2276	0.022	4	2276	0.044	4	2276	0.066
12:00 - 13:00	4	2276	0.033	4	2276	0.033	4	2276	0.066
13:00 - 14:00	4	2276	0.066	4	2276	0.044	4	2276	0.110
14:00 - 15:00	4	2276	0.033	4	2276	0.033	4	2276	0.066
15:00 - 16:00	4	2276	0.033	4	2276	0.044	4	2276	0.077
16:00 - 17:00	4	2276	0.011	4	2276	0.011	4	2276	0.022
17:00 - 18:00	4	2276	0.011	4	2276	0.022	4	2276	0.033
18:00 - 19:00	4	2276	0.011	4	2276	0.000	4	2276	0.011
19:00 - 20:00	2	1845	0.000	2	1845	0.027	2	1845	0.027
20:00 - 21:00	2	1845	0.000	2	1845	0.000	2	1845	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.373			0.389			0.762

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.

BELLAMY ROBERTS WESTERN LANE ODIHAM

Licence No: 200601

TRIP RATE for Land Use 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)

MOTOR CYCLES

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	1845	0.000	2	1845	0.000	2	1845	0.000
06:00 - 07:00	2	1845	0.000	2	1845	0.000	2	1845	0.000
07:00 - 08:00	4	2276	0.011	4	2276	0.000	4	2276	0.011
08:00 - 09:00	4	2276	0.000	4	2276	0.000	4	2276	0.000
09:00 - 10:00	4	2276	0.000	4	2276	0.000	4	2276	0.000
10:00 - 11:00	4	2276	0.022	4	2276	0.000	4	2276	0.022
11:00 - 12:00	4	2276	0.011	4	2276	0.011	4	2276	0.022
12:00 - 13:00	4	2276	0.011	4	2276	0.000	4	2276	0.011
13:00 - 14:00	4	2276	0.000	4	2276	0.000	4	2276	0.000
14:00 - 15:00	4	2276	0.000	4	2276	0.011	4	2276	0.011
15:00 - 16:00	4	2276	0.000	4	2276	0.022	4	2276	0.022
16:00 - 17:00	4	2276	0.011	4	2276	0.000	4	2276	0.011
17:00 - 18:00	4	2276	0.000	4	2276	0.000	4	2276	0.000
18:00 - 19:00	4	2276	0.000	4	2276	0.000	4	2276	0.000
19:00 - 20:00	2	1845	0.000	2	1845	0.000	2	1845	0.000
20:00 - 21:00	2	1845	0.000	2	1845	0.000	2	1845	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.066			0.044			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.

Calculation Reference: AUDIT-200601-241127-1125

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
Category : D - INDUSTRIAL ESTATE
TOTAL VEHICLES

<u>Selected regions and areas:</u>		
01	GREATER LONDON	
	BE BEXLEY	1 days
	BK BARKING	1 days
02	SOUTH EAST	
	EX ESSEX	1 days
03	SOUTH WEST	
	DV DEVON	1 days
04	EAST ANGLIA	
	SF SUFFOLK	1 days
06	WEST MIDLANDS	
	WM WEST MIDLANDS	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	AK WAKEFIELD	3 days
08	NORTH WEST	
	LC LANCASHIRE	2 days
10	WALES	
	SW SWANSEA	1 days

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

BELLAMY ROBERTS WESTERN LANE ODIHAM

Licence No: 200601

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: 1138 to 5280 (units: sqm)
 Range Selected by User: 552 to 5500 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/16 to 30/06/23

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:

Monday	3 days
Tuesday	4 days
Wednesday	1 days
Thursday	2 days
Friday	2 days

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

Selected survey types:

Manual count	12 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)	3
Edge of Town	9

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	8
Development Zone	1
Residential Zone	1
No Sub Category	2

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	5 days - Selected
Servicing vehicles Excluded	8 days - Selected

Secondary Filtering selection:**Use Class:**

Not Known	12 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:

1,001 to 5,000	1 days
10,001 to 15,000	4 days
15,001 to 20,000	3 days
20,001 to 25,000	1 days
25,001 to 50,000	3 days

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

Population within 5 miles:

125,001 to 250,000	8 days
250,001 to 500,000	2 days
500,001 or More	2 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	8 days
1.1 to 1.5	3 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	12 days
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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	10 days
0 None	1 days
1b Very poor	1 days

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

LIST OF SITES relevant to selection parameters

1	AK-02-D-01	INDUSTRIAL ESTATE	WAKEFIELD
	CARR WOOD ROAD		
	CASTLEFORD		
	Edge of Town		
	Development Zone		
	Total Gross floor area:	1776 sqm	
	Survey date: MONDAY	22/05/17	Survey Type: MANUAL
2	AK-02-D-02	INDUSTRIAL ESTATE (PART)	WAKEFIELD
	PIONEER WAY		
	CASTLEFORD		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	4328 sqm	
	Survey date: TUESDAY	23/05/17	Survey Type: MANUAL
3	AK-02-D-03	INDUSTRIAL ESTATE	WAKEFIELD
	THUNDERHEAD RIDGE RD		
	CASTLEFORD		
	GLASSHOUGHTON		
	Edge of Town		
	No Sub Category		
	Total Gross floor area:	3191 sqm	
	Survey date: MONDAY	15/05/17	Survey Type: MANUAL
4	BE-02-D-01	INDUSTRIAL ESTATE	BEXLEY
	CRABTREE MANORWAY N.		
	ERITH		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	3300 sqm	
	Survey date: WEDNESDAY	19/09/18	Survey Type: MANUAL
5	BK-02-D-01	INDUSTRIAL ESTATE	BARKING
	RIVER ROAD		
	BARKING		
	Suburban Area (PPS6 Out of Centre)		
	Industrial Zone		
	Total Gross floor area:	4180 sqm	
	Survey date: TUESDAY	08/09/20	Survey Type: MANUAL
6	DV-02-D-07	INDUSTRIAL ESTATE	DEVON
	BITTERN ROAD		
	EXETER		
	SOWTON IND. ESTATE		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	3600 sqm	
	Survey date: MONDAY	03/07/17	Survey Type: MANUAL
7	EX-02-D-03	INDUSTRIAL ESTATE	ESSEX
	WYNCOLLS ROAD		
	COLCHESTER		
	SEVERALLS INDUSTRIAL PK		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	4876 sqm	
	Survey date: FRIDAY	18/05/18	Survey Type: MANUAL
8	LC-02-D-07	INDUSTRIAL ESTATE	LANCASHIRE
	CHAIN CAUL WAY		
	PRESTON		
	ASHTON-ON-RIBBLE		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	4700 sqm	
	Survey date: FRIDAY	17/11/17	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

9	LC-02-D-08 NOOK LANE BAMBER BRIDGE	INDUSTRIAL ESTATE	LANCASHIRE
	Edge of Town Industrial Zone Total Gross floor area:	4000 sqm	
	Survey date: TUESDAY	06/11/18	Survey Type: MANUAL
10	SF-02-D-03 LANDSEER ROAD IPSWICH	INDUSTRIAL ESTATE	SUFFOLK
	Suburban Area (PPS6 Out of Centre) No Sub Category Total Gross floor area:	3550 sqm	
	Survey date: THURSDAY	17/09/20	Survey Type: MANUAL
11	SW-02-D-02 CLARION COURT SWANSEA SWANSEA ENTERPRISE PK	INDUSTRIAL ESTATE	SWANSEA
	Edge of Town Industrial Zone Total Gross floor area:	5280 sqm	
	Survey date: THURSDAY	10/10/19	Survey Type: MANUAL
12	WM-02-D-03 JUNCTION ROAD STOURBRIDGE AUDNAM	INDUSTRIAL ESTATE	WEST MIDLANDS
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Gross floor area:	1138 sqm	
	Survey date: TUESDAY	28/11/17	Survey Type: MANUAL

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.

MANUALLY DESELECTED SURVEYS

Site Ref	Survey Date	Reason for Deselection
NY-02-D-04	30/06/23	not applicable

BELLAMY ROBERTS WESTERN LANE ODIHAM

Licence No: 200601

TRIP RATE for Land Use 02 - EMPLOYMENT/D - INDUSTRIAL ESTATE

TOTAL VEHICLES

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	4730	0.042	2	4730	0.074	2	4730	0.116
06:00 - 07:00	2	4730	0.285	2	4730	0.211	2	4730	0.496
07:00 - 08:00	12	3660	0.594	12	3660	0.184	12	3660	0.778
08:00 - 09:00	12	3660	0.751	12	3660	0.437	12	3660	1.188
09:00 - 10:00	12	3660	0.631	12	3660	0.451	12	3660	1.082
10:00 - 11:00	12	3660	0.665	12	3660	0.553	12	3660	1.218
11:00 - 12:00	12	3660	0.649	12	3660	0.690	12	3660	1.339
12:00 - 13:00	12	3660	0.628	12	3660	0.706	12	3660	1.334
13:00 - 14:00	12	3660	0.601	12	3660	0.556	12	3660	1.157
14:00 - 15:00	12	3660	0.517	12	3660	0.622	12	3660	1.139
15:00 - 16:00	12	3660	0.519	12	3660	0.492	12	3660	1.011
16:00 - 17:00	12	3660	0.449	12	3660	0.751	12	3660	1.200
17:00 - 18:00	12	3660	0.260	12	3660	0.638	12	3660	0.898
18:00 - 19:00	12	3660	0.082	12	3660	0.207	12	3660	0.289
19:00 - 20:00	3	4253	0.016	3	4253	0.141	3	4253	0.157
20:00 - 21:00	3	4253	0.000	3	4253	0.039	3	4253	0.039
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			6.689			6.752			13.441

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:	1138 - 5280 (units: sqm)
Survey date range:	01/01/16 - 30/06/23
Number of weekdays (Monday-Friday):	13
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	1
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.

BELLAMY ROBERTS WESTERN LANE ODIHAM

Licence No: 200601

TRIP RATE for Land Use 02 - EMPLOYMENT/D - INDUSTRIAL ESTATE

TAXIS

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	4730	0.000	2	4730	0.000	2	4730	0.000
06:00 - 07:00	2	4730	0.000	2	4730	0.000	2	4730	0.000
07:00 - 08:00	12	3660	0.000	12	3660	0.000	12	3660	0.000
08:00 - 09:00	12	3660	0.000	12	3660	0.000	12	3660	0.000
09:00 - 10:00	12	3660	0.000	12	3660	0.000	12	3660	0.000
10:00 - 11:00	12	3660	0.005	12	3660	0.005	12	3660	0.010
11:00 - 12:00	12	3660	0.002	12	3660	0.002	12	3660	0.004
12:00 - 13:00	12	3660	0.007	12	3660	0.007	12	3660	0.014
13:00 - 14:00	12	3660	0.000	12	3660	0.000	12	3660	0.000
14:00 - 15:00	12	3660	0.005	12	3660	0.005	12	3660	0.010
15:00 - 16:00	12	3660	0.002	12	3660	0.000	12	3660	0.002
16:00 - 17:00	12	3660	0.002	12	3660	0.002	12	3660	0.004
17:00 - 18:00	12	3660	0.000	12	3660	0.000	12	3660	0.000
18:00 - 19:00	12	3660	0.000	12	3660	0.000	12	3660	0.000
19:00 - 20:00	3	4253	0.000	3	4253	0.000	3	4253	0.000
20:00 - 21:00	3	4253	0.000	3	4253	0.000	3	4253	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.023			0.021			0.044

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.

BELLAMY ROBERTS WESTERN LANE ODIHAM

Licence No: 200601

TRIP RATE for Land Use 02 - EMPLOYMENT/D - INDUSTRIAL ESTATE

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	4730	0.000	2	4730	0.000	2	4730	0.000
06:00 - 07:00	2	4730	0.011	2	4730	0.000	2	4730	0.011
07:00 - 08:00	12	3660	0.023	12	3660	0.018	12	3660	0.041
08:00 - 09:00	12	3660	0.039	12	3660	0.027	12	3660	0.066
09:00 - 10:00	12	3660	0.036	12	3660	0.032	12	3660	0.068
10:00 - 11:00	12	3660	0.025	12	3660	0.018	12	3660	0.043
11:00 - 12:00	12	3660	0.027	12	3660	0.046	12	3660	0.073
12:00 - 13:00	12	3660	0.032	12	3660	0.018	12	3660	0.050
13:00 - 14:00	12	3660	0.027	12	3660	0.025	12	3660	0.052
14:00 - 15:00	12	3660	0.023	12	3660	0.034	12	3660	0.057
15:00 - 16:00	12	3660	0.025	12	3660	0.020	12	3660	0.045
16:00 - 17:00	12	3660	0.025	12	3660	0.027	12	3660	0.052
17:00 - 18:00	12	3660	0.002	12	3660	0.011	12	3660	0.013
18:00 - 19:00	12	3660	0.000	12	3660	0.000	12	3660	0.000
19:00 - 20:00	3	4253	0.000	3	4253	0.000	3	4253	0.000
20:00 - 21:00	3	4253	0.000	3	4253	0.000	3	4253	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.295			0.276			0.571

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/D - INDUSTRIAL ESTATE
 PSVS
 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	4730	0.000	2	4730	0.000	2	4730	0.000
06:00 - 07:00	2	4730	0.000	2	4730	0.000	2	4730	0.000
07:00 - 08:00	12	3660	0.000	12	3660	0.000	12	3660	0.000
08:00 - 09:00	12	3660	0.000	12	3660	0.000	12	3660	0.000
09:00 - 10:00	12	3660	0.000	12	3660	0.002	12	3660	0.002
10:00 - 11:00	12	3660	0.000	12	3660	0.000	12	3660	0.000
11:00 - 12:00	12	3660	0.000	12	3660	0.000	12	3660	0.000
12:00 - 13:00	12	3660	0.000	12	3660	0.000	12	3660	0.000
13:00 - 14:00	12	3660	0.000	12	3660	0.000	12	3660	0.000
14:00 - 15:00	12	3660	0.000	12	3660	0.000	12	3660	0.000
15:00 - 16:00	12	3660	0.000	12	3660	0.000	12	3660	0.000
16:00 - 17:00	12	3660	0.000	12	3660	0.000	12	3660	0.000
17:00 - 18:00	12	3660	0.000	12	3660	0.000	12	3660	0.000
18:00 - 19:00	12	3660	0.000	12	3660	0.000	12	3660	0.000
19:00 - 20:00	3	4253	0.000	3	4253	0.000	3	4253	0.000
20:00 - 21:00	3	4253	0.000	3	4253	0.000	3	4253	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.002			0.002

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.*

BELLAMY ROBERTS WESTERN LANE ODIHAM

Licence No: 200601

TRIP RATE for Land Use 02 - EMPLOYMENT/D - INDUSTRIAL ESTATE

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	4730	0.042	2	4730	0.000	2	4730	0.042
06:00 - 07:00	2	4730	0.053	2	4730	0.021	2	4730	0.074
07:00 - 08:00	12	3660	0.020	12	3660	0.000	12	3660	0.020
08:00 - 09:00	12	3660	0.011	12	3660	0.005	12	3660	0.016
09:00 - 10:00	12	3660	0.007	12	3660	0.007	12	3660	0.014
10:00 - 11:00	12	3660	0.002	12	3660	0.007	12	3660	0.009
11:00 - 12:00	12	3660	0.000	12	3660	0.002	12	3660	0.002
12:00 - 13:00	12	3660	0.005	12	3660	0.005	12	3660	0.010
13:00 - 14:00	12	3660	0.002	12	3660	0.005	12	3660	0.007
14:00 - 15:00	12	3660	0.005	12	3660	0.007	12	3660	0.012
15:00 - 16:00	12	3660	0.002	12	3660	0.009	12	3660	0.011
16:00 - 17:00	12	3660	0.005	12	3660	0.014	12	3660	0.019
17:00 - 18:00	12	3660	0.002	12	3660	0.018	12	3660	0.020
18:00 - 19:00	12	3660	0.000	12	3660	0.002	12	3660	0.002
19:00 - 20:00	3	4253	0.000	3	4253	0.000	3	4253	0.000
20:00 - 21:00	3	4253	0.000	3	4253	0.000	3	4253	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.156			0.102			0.258

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.

BELLAMY ROBERTS WESTERN LANE ODIHAM

Licence No: 200601

TRIP RATE for Land Use 02 - EMPLOYMENT/D - INDUSTRIAL ESTATE

CARS

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	4730	0.032	2	4730	0.011	2	4730	0.043
06:00 - 07:00	2	4730	0.148	2	4730	0.074	2	4730	0.222
07:00 - 08:00	12	3660	0.337	12	3660	0.061	12	3660	0.398
08:00 - 09:00	12	3660	0.426	12	3660	0.121	12	3660	0.547
09:00 - 10:00	12	3660	0.369	12	3660	0.173	12	3660	0.542
10:00 - 11:00	12	3660	0.337	12	3660	0.262	12	3660	0.599
11:00 - 12:00	12	3660	0.319	12	3660	0.335	12	3660	0.654
12:00 - 13:00	12	3660	0.326	12	3660	0.387	12	3660	0.713
13:00 - 14:00	12	3660	0.337	12	3660	0.305	12	3660	0.642
14:00 - 15:00	12	3660	0.260	12	3660	0.355	12	3660	0.615
15:00 - 16:00	12	3660	0.260	12	3660	0.282	12	3660	0.542
16:00 - 17:00	12	3660	0.237	12	3660	0.476	12	3660	0.713
17:00 - 18:00	12	3660	0.191	12	3660	0.487	12	3660	0.678
18:00 - 19:00	12	3660	0.057	12	3660	0.153	12	3660	0.210
19:00 - 20:00	3	4253	0.008	3	4253	0.110	3	4253	0.118
20:00 - 21:00	3	4253	0.000	3	4253	0.016	3	4253	0.016
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.644			3.608			7.252

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.

BELLAMY ROBERTS WESTERN LANE ODIHAM

Licence No: 200601

TRIP RATE for Land Use 02 - EMPLOYMENT/D - INDUSTRIAL ESTATE

LGVS

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	4730	0.011	2	4730	0.063	2	4730	0.074
06:00 - 07:00	2	4730	0.127	2	4730	0.137	2	4730	0.264
07:00 - 08:00	12	3660	0.235	12	3660	0.105	12	3660	0.340
08:00 - 09:00	12	3660	0.282	12	3660	0.289	12	3660	0.571
09:00 - 10:00	12	3660	0.221	12	3660	0.244	12	3660	0.465
10:00 - 11:00	12	3660	0.296	12	3660	0.264	12	3660	0.560
11:00 - 12:00	12	3660	0.298	12	3660	0.303	12	3660	0.601
12:00 - 13:00	12	3660	0.262	12	3660	0.294	12	3660	0.556
13:00 - 14:00	12	3660	0.235	12	3660	0.223	12	3660	0.458
14:00 - 15:00	12	3660	0.230	12	3660	0.228	12	3660	0.458
15:00 - 16:00	12	3660	0.228	12	3660	0.189	12	3660	0.417
16:00 - 17:00	12	3660	0.184	12	3660	0.239	12	3660	0.423
17:00 - 18:00	12	3660	0.066	12	3660	0.137	12	3660	0.203
18:00 - 19:00	12	3660	0.025	12	3660	0.050	12	3660	0.075
19:00 - 20:00	3	4253	0.008	3	4253	0.031	3	4253	0.039
20:00 - 21:00	3	4253	0.000	3	4253	0.024	3	4253	0.024
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.708			2.820			5.528

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.

BELLAMY ROBERTS WESTERN LANE ODIHAM

Licence No: 200601

TRIP RATE for Land Use 02 - EMPLOYMENT/D - INDUSTRIAL ESTATE
MOTOR CYCLES
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	4730	0.000	2	4730	0.000	2	4730	0.000
06:00 - 07:00	2	4730	0.000	2	4730	0.000	2	4730	0.000
07:00 - 08:00	12	3660	0.000	12	3660	0.000	12	3660	0.000
08:00 - 09:00	12	3660	0.005	12	3660	0.000	12	3660	0.005
09:00 - 10:00	12	3660	0.005	12	3660	0.000	12	3660	0.005
10:00 - 11:00	12	3660	0.002	12	3660	0.005	12	3660	0.007
11:00 - 12:00	12	3660	0.002	12	3660	0.005	12	3660	0.007
12:00 - 13:00	12	3660	0.002	12	3660	0.000	12	3660	0.002
13:00 - 14:00	12	3660	0.002	12	3660	0.002	12	3660	0.004
14:00 - 15:00	12	3660	0.000	12	3660	0.000	12	3660	0.000
15:00 - 16:00	12	3660	0.005	12	3660	0.000	12	3660	0.005
16:00 - 17:00	12	3660	0.000	12	3660	0.007	12	3660	0.007
17:00 - 18:00	12	3660	0.000	12	3660	0.002	12	3660	0.002
18:00 - 19:00	12	3660	0.000	12	3660	0.005	12	3660	0.005
19:00 - 20:00	3	4253	0.000	3	4253	0.000	3	4253	0.000
20:00 - 21:00	3	4253	0.000	3	4253	0.000	3	4253	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.023			0.026			0.049

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.

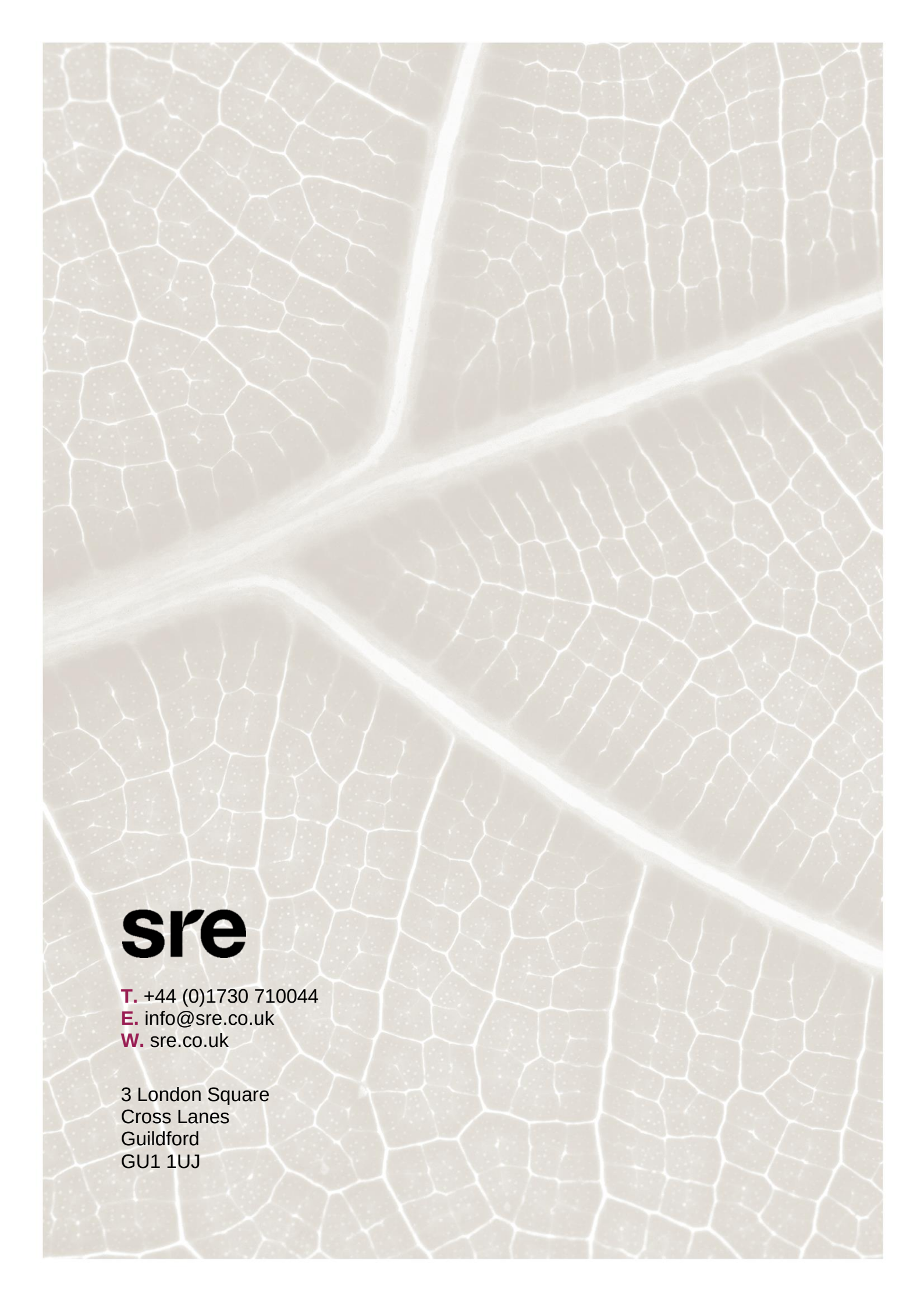
Appendix D – Measures Relevant for Demolition, Earthworks, Construction and Track Out

Mitigation Measure	Low Risk	Medium Risk	High Risk
Site management			
Develop and implement a stakeholder communication plan that includes community engagement before work commences on site.		XX	XX
Develop a Dust Management Plan.		XX	XX
Display the name and contact details of person(s) accountable for air quality pollutant emissions and dust issues at the site boundary	XX	XX	XX
Display the head or regional office contact information.	XX	XX	XX
Record and respond to all dust and air quality pollutant emissions complaints.	XX	XX	XX
Make complaints log available to the local authority when asked.	XX	XX	XX
Carry out regular site inspections to monitor compliance with air quality and dust control procedures, record inspection results, and make an inspection log available to the local authority when asked.	XX	XX	XX
Increase the frequency of site inspections by those accountable for dust and air quality pollutant emissions issues when activities with a high potential to produce dust and emissions and dust are being carried out, and during prolonged dry or windy conditions.	XX	XX	XX
Record any exceptional incidents that cause dust and air quality pollutant emissions, either on or off the site, and the action taken to resolve the situation is recorded in the logbook.	XX	XX	XX
Hold regular liaison meetings with other high risk construction sites within 500m of the site boundary, to ensure plans are co-ordinated and dust and Particulate Matter emissions are minimised.			XX
Preparing and maintaining the site			
Plan site layout: machinery and dust causing activities should be located away from receptors.	XX	XX	XX
Erect solid screens or barriers around dust activities or at the site boundary that are, at least, as high as any stockpiles on site.	XX	XX	XX
Fully enclose site or specific operations where there is a high potential for dust production, while the site is active, for an extensive period.	X	XX	XX
Install green walls, screens or other green infrastructure to minimise the impact of dust and pollution.		X	X
Avoid site runoff of water or mud.	XX	XX	XX
Keep site fencing, barriers and scaffolding clean using wet methods.	X	XX	XX

Mitigation Measure	Low Risk	Medium Risk	High Risk
Remove materials from site as soon as possible.	X	XX	XX
Cover, seed or fence stockpiles to prevent wind whipping.		XX	XX
Carry out regular dust soiling checks of buildings within 100m of the site boundary, and cleaning to be provided if necessary.		X	XX
Provide showers and ensure a change of shoes and clothes are required before going off-site to reduce transport of dust.			X
Agree on monitoring locations with the Local Authority.		XX	XX
Where possible, commence baseline monitoring at least three months before phase begins.		XX	XX
Put in place real-time dust and air quality pollutant monitors across the site and ensure they are checked regularly.		XX	XX
Operating vehicle/machinery and sustainable travel			
Ensure all on-road vehicles comply with the requirements of the Interbridges Low Emission Zone.	XX	XX	XX
Ensure all non-road mobile machinery (NRMM) comply with the standards set within this guidance.	XX	XX	XX
Ensure all vehicles switch off engines when stationary – no idling vehicles.	XX	XX	XX
Avoid the use of diesel- or petrol-powered generators and use mains electricity or battery powered equipment where possible.	XX	XX	XX
Impose and signpost a maximum-speed-limit of 10mph on surfaced haul routes and work areas (if long haul routes are required these speed limits may be increased with suitable additional control measures provided, subject to the approval of the nominated undertaker and with the agreement of the local authority, where appropriate).	X	X	XX
Produce a Construction Logistics Plan to manage the sustainable delivery of goods and materials.		XX	XX
Implement a Travel Plan that supports and encourages sustainable travel (public transport, cycling, walking, and car-sharing).	XX	XX	XX
Operations			
Only use cutting, grinding or sawing equipment fitted or in conjunction with suitable dust suppression techniques such as water sprays or local extraction, e.g. suitable local exhaust ventilation systems.	XX	XX	XX
Ensure an adequate water supply on the site for effective dust/Particulate Matter mitigation (using recycled water where possible).	XX	XX	XX
Use enclosed chutes, conveyors and covered skips.	XX	XX	XX
Minimise drop heights from conveyors, loading shovels, hoppers and other loading or handling equipment and use fine water sprays on such equipment wherever appropriate.	XX	XX	XX

Mitigation Measure	Low Risk	Medium Risk	High Risk
Ensure equipment is readily available on site to clean any dry spillages and clean up spillages as soon as reasonably practicable after the event using wet cleaning methods.		XX	XX
Waste management			
Reuse and recycle waste to reduce dust from waste materials.	XX	XX	XX
Avoid bonfires and burning of waste materials.	XX	XX	XX

XX Highly Recommended X Desirable

The background of the entire page is a high-magnification, grayscale micrograph of plant tissue, likely a leaf. It shows a network of large, polygonal cells with prominent, light-colored cell walls. Several larger, more elongated cells are visible, possibly representing vascular bundles or larger epidermal cells. The overall texture is intricate and organic.

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