



PLANNING STAGE AIR QUALITY ASSESSMENT

25-27 PERRYMOUNT ROAD, HAYWARDS HEATH, RH16 3XL

LTRO PERRYMOUNT LTD

MAY 2026

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RH16 3XL

Our Ref: 9118_001R_1-0_HF



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Date: 19 May 2026

Project No: 9118

Status: First Issue

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REVISION HISTORY

Version	Comments	Changes made by	Approved by
1.0	First issued version	HF	AG

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1 INTRODUCTION

This report has been prepared in support of the planning application submitted by LTRO Perrymount Ltd to Mid Sussex District Council (MSDC). The application is for the construction of a 7-storey residential building comprising 30 flats.

The proposed development will use air source heat pumps (ASHP) to meet the energy demand for hot water and space heating. It is expected that the development will result not result in a significant change in daily traffic and is anticipated to result in a net decrease from its existing use. The air quality effects of the development's vehicle movements are addressed later within this document.

Air quality planning policy relevant to the assessment is presented and briefly discussed in Section 2 of this report. The pollutants for consideration, along with air quality standards, are presented in Section 3. The site settings and proposed development are described in Section 4, and baseline air quality concentrations are reviewed in Section 5. The air quality assessment and site suitability are presented in Section 6. The dust risk assessment and management plan are presented in Section 7, along with construction and operational mitigation measures in Section 8. The emissions mitigation assessment is presented in Section 9, and the conclusions are presented in Section 10.

2 AIR QUALITY PLANNING POLICY

2.1 National and Regional Planning Policy and Guidance

2.1.1 National Planning Policy Framework (NPPF)

The NPPF¹ presents the Government's planning policies for England and how these are expected to be applied, with the development of local and neighbourhood plans under the framework. Paragraph 187 e of the NPPF identifies that the planning system should aim to conserve and enhance the natural and local environment by *"preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans;..."*

Paragraph 199 states *"Planning policies and decisions should sustain and contribute towards compliance with relevant limit values or national objectives for pollutants, taking into account the presence of Air Quality Management Areas and Clean Air Zones, and the cumulative impacts from individual sites in local areas. Opportunities to improve air quality or mitigate impacts should be identified, such as through traffic and travel management, and green infrastructure provision and enhancement. So far as possible these opportunities should be considered at the plan-making stage, to ensure a strategic approach and limit the need for issues to be reconsidered when determining individual applications. Planning decisions should ensure that any new development in Air Quality Management Areas and Clean Air Zones is consistent with the local air quality action plan."*

2.1.2 Planning Practice Guidance (PPG)

PPG² for air quality has been produced that gives an indication of details the local authority may want to consider when there are concerns about air quality, special requirements such as the height of chimneys and securing mitigation measures through planning conditions and obligations. The PPG considers that dust can also be a planning concern for effects on local amenity. The guidance considers that assessments should be proportional to the nature and scale of development proposed and the level of concern about air quality. The mitigation of air quality impacts and effects is to depend on the proposed development and should be proportionate to the likely impact.

¹ Ministry of Housing, Communities & Local Government. National Planning Policy Framework. 2024.

² Department for Communities and Local Government. 2019. Planning Practice Guidance – Air Quality. Revision date November 2019.

2.1.3 The IAQM's The Control of Dust and Emissions During Construction and Demolition

The IAQM's Guidance on the assessment of dust from Demolition and Construction³ seeks to reduce emissions of dust, PM₁₀ and PM_{2.5} from construction and demolition activities. The guidance considers that during the pre-application phase, local authorities should provide and advise on controlling dust and emissions and should set out their requirements for the planning application.

During the detailed application phase, the developer should submit an Air Quality and Dust Risk Assessment (AQDRA), which should confirm that an Air Quality and Dust Management Plan (AQDMP), following the guidance in the SPG, will be submitted to the local authority prior to works commencing on-site.

The AQDRA provides a summary of the risk to soiling (dirt deposited on surrounding structures), health and the natural environment, and recommends emission control measures to be implemented as part of the scheme.

This document considers that the activities on construction sites can be divided into four types to reflect their different impact:

- i. demolition;
- ii. earthworks;
- iii. construction; and
- iv. trackout.

These activities can lead to three separate dust impacts:

- i. the risk of health effects due to an increase in exposure to PM₁₀;
- ii. annoyance due to dust soiling; and
- iii. harm to ecological receptors.

2.2 Local Air Quality Policy, Guidance and Local Air Quality Management

2.2.1 Air Quality and Emissions Mitigation Guidance for Sussex (2021)

Sussex' Air Quality and Emissions Mitigation Guidance⁴ is used as a reference guide to improve air quality across Sussex.

Guidance is given for air quality assessments, which tends to be aligned with the guidance provided by the IAQM. It also states that emission mitigation assessments are required for developments that are:

- Classed as a major development, as defined by the Town and Country Planning Order;
- Within an Air Quality Management Area (AQMA);
- In relevant proximity to an AQMA;
- In an area close to exceeding the Air Quality Objectives (AQO); or/and,
- B8 storage and distribution use class with a floorspace of 500 m² or more.

If the development does not match any of the above conditions, no mitigation damage cost assessment will be required. If the development does match any of the above conditions, a damage cost calculation should be undertaken to determine an appropriate sum to be spent on mitigating the impact on air quality over a 5-year period.

2.2.2 Mid Sussex District Plan 2014-2031

MSDC adopted the planning framework⁵ in March 2018 and the framework sets out the district's policies covering housing, infrastructure, environmental protection, and community needs, and serves as the primary framework for planning decisions. Specific mention of air quality is included in Policy DP29: Noise, Air and Light Pollution, which states:

³ Institute of Air Quality Management. Guidance on the assessment of dust from Demolition and Construction. V2.2. 2024.

⁴ Sussex Air. Air Quality and Emissions Mitigation Guidance. 2021.

⁵ Mid Sussex District Council, Mid Sussex District Plan 2014 – 2031. 2018

“The environment, including nationally designated environmental sites, nationally protected landscapes, areas of nature conservation or geological interest, wildlife habitats, and the quality of people’s life will be protected from unacceptable levels of noise, light and air pollution by only permitting development where:

[...] Air Pollution:

1. *It does not cause unacceptable levels of air pollution;*
2. *Development on land adjacent to an existing use which generates air pollution or odour would not cause any adverse effects on the proposed development or can be mitigated to reduce exposure to poor air quality to recognised and acceptable levels;*
3. *Development proposals (where appropriate) are consistent with Air Quality Management Plans.”*

2.2.3 Draft Mid Sussex District Council Air Quality Strategy 2026 - 2030

MSDC have produced a draft air quality strategy for 2026 to 2030. The strategy builds on recent improvements in local air quality. The strategy emphasises proactive, long-term interventions to maintain good air quality, including reducing emissions from road traffic, supporting a modal shift toward sustainable transport, and expanding electric vehicle infrastructure in partnership with West Sussex stakeholders. It also integrates with the Council’s Sustainable Economy Strategy, highlighting the importance of aligning air quality goals with its net-zero ambitions. Finally, the draft strategy underlines the need for cross-agency collaboration, particularly through the Sussex Air Quality Partnership, to deliver coordinated regional action on air quality.

3 AIR QUALITY – POLLUTANTS FOR CONSIDERATION

3.1 Introduction

The pollutants for consideration within MSDC are nitrogen dioxide (NO₂) and particulate matter (PM).

Oxides of nitrogen include nitric oxide (NO) and nitrogen dioxide (NO₂). NO₂ can cause inflammation of the lungs, lead to shortness of breath and coughing, and can reduce immunity to lung infections such as bronchitis. PM₁₀ is the fraction of PM that is 10 µm or less in size, and PM_{2.5} is the fraction of PM that is 2.5 µm or less in size. Both can be drawn into the lungs and can cause respiratory illness, cardiovascular illness and mortality.

3.2 Air Quality Standards

3.2.1 European and National Air Quality Standards

Air Quality Directive 2008/50/EC⁶ introduced legally binding “limit value” targets for the member governments to reduce air pollution to concentrations at which minimal effects on health are likely to occur. The directive was transposed into law through the Air Quality (England) Standards Regulations⁷ with air quality objectives and dates by which they were to be achieved. The sensitive locations at which the standards and objectives apply are places where the population is expected to be exposed to the various pollutants over the averaging period in question. For objectives to which an annual mean standard applies, the most common sensitive receptor locations used to measure concentrations are areas of residential housing, since it is reasonable to expect that people living in their homes could be exposed to pollutants over such a period of time. For shorter averaging periods of between 15 minutes, 1 hour or 1 day, the sensitive receptor location can be anywhere where the public could be exposed to the pollutant over these shorter periods of time. The annual mean objectives are not relevant for the building façades of offices or other places of work where members of the public do not have regular access, kerbsides or gardens.

The Environmental Targets (Fine Particulate Matter) (England) Regulations 2023⁸ defines that *“The annual mean concentration target is that by the end of 31st December 2040 the annual mean level of PM_{2.5} in ambient*

⁶ Council Directive 2008/50/EC of 21 May 2008 on ambient air quality and cleaner air for Europe.

⁷ The Air Quality Standards Regulations 2010, SI 2010/1001

⁸ Statutory instrument. The Environmental Targets (Fine Particulate Matter) (England) Regulations. 2023.

air must be equal to or less than $10 \mu\text{g}/\text{m}^3$ ("the target level"). The Air Quality Strategy⁹ introduces interim targets to be achieved by January 2028. A summary of the objectives and targets is shown in Table 3.1, as amended by the Brexit regulations.

Table 3.1: Air Quality Objectives for NO₂, PM₁₀ and PM_{2.5}

Pollutant	Air Quality Objectives for NO ₂ and Particulates		Date to be Achieved By
	Concentration	Measured as	
NO ₂	$40 \mu\text{g}/\text{m}^3$	Annual mean	31 December 2005
	$200 \mu\text{g}/\text{m}^3$ not to be exceeded more than 18 hours in a year	Hourly mean	31 December 2005
PM ₁₀	$50 \mu\text{g}/\text{m}^3$ not to be exceeded more than 35 times a year	24-hour mean	31 December 2004
	$40 \mu\text{g}/\text{m}^3$	Annual mean	31 December 2004
PM _{2.5}	$10 \mu\text{g}/\text{m}^3$	Annual mean	2040
	$12 \mu\text{g}/\text{m}^3$	Annual mean	January 2028
	$20 \mu\text{g}/\text{m}^3$	Annual mean	January 2020
	35% reduction in average population exposure relative to 2018	Annual mean	2040
	22 % reduction in average population exposure relative to 2018	Annual mean	2028

The Environment Act 1995¹⁰ introduced the requirement for local authority management of air quality. Part IV of this Act details the duties of local authorities in carrying out their local air quality management (LAQM) to tackle poor air quality. Part of the requirement is for the Review and Assessment of air quality and production of Updating and Screening Assessments (USA) and Status Reports. Where exceedance of these objectives is shown or anticipated, the local authority is required to produce an Air Quality Action Plan to reduce emissions and pollutant concentrations.

4 SITE SETTING & PROPOSED DEVELOPMENT

4.1 Site Setting

The site is approximately 0.19 hectares in size and is located in a residential and commercial area, approximately 200 m south of Haywards Heath railway station, at national grid reference (NGR) 533050, 124285, as shown in Figure 4.1.

The site was previously used as a surface-level car park associated with the former office use of Central House. The car park has become redundant following the prior approval conversion of Central House from office use to residential use.

The site is bound by Perrymount Road (the B2028) to the east of the site, which is expected to carry relatively high traffic flows due to its local function and connectivity. As a result, baseline concentrations of NO₂, PM₁₀

⁹ Defra. Air Quality Strategy. Framework for local authority delivery. 2023.

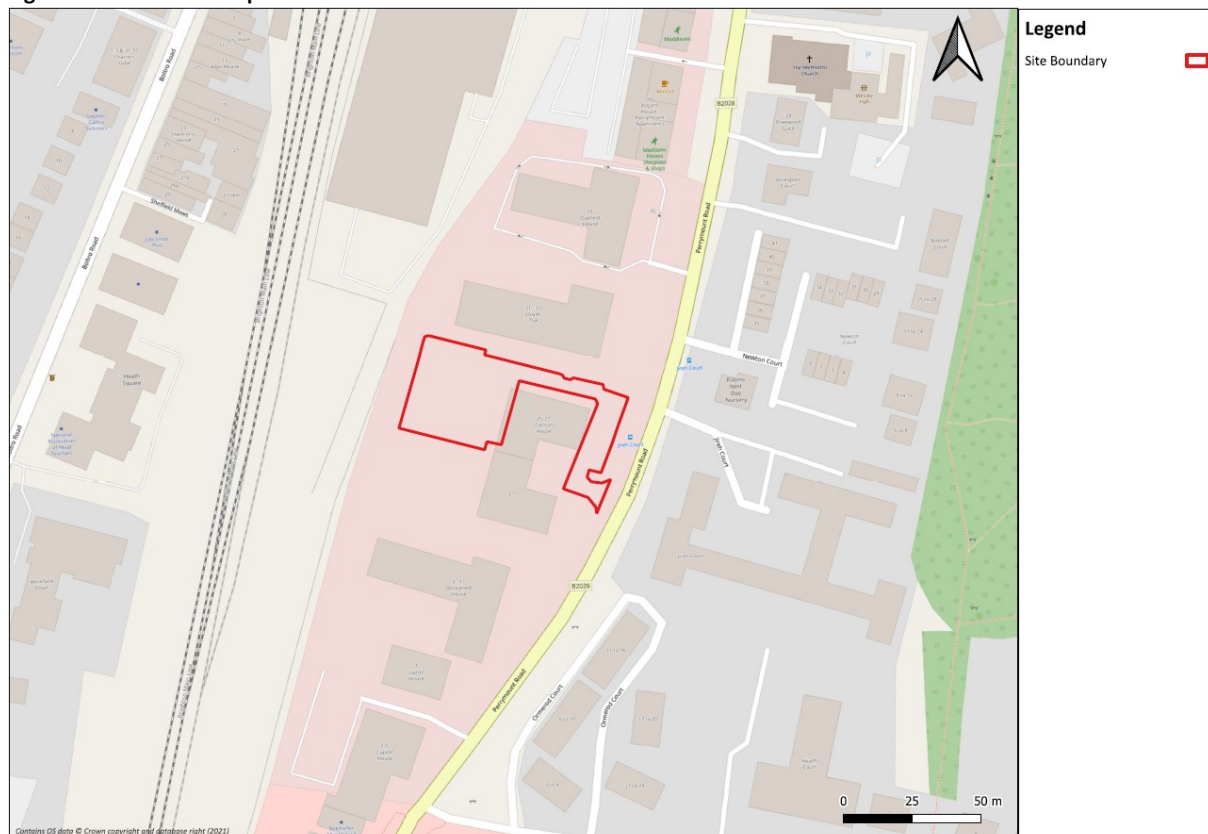
¹⁰ Office of the Deputy Prime Minister. The Environment Act. 1995.

and PM_{2.5} across the site are expected to be influenced by nearby road traffic emissions, with conditions broadly comparable to those observed at roadside monitoring locations. Although the proposed building is located over 60 m from the road itself.

The site is bounded:

- To the north by 31-33 Perrymount Road, which has planning approval for 98 residential units (DM/22/2303) with Haywards Heath train station beyond;
- To the east by Perrymount Road with residential properties beyond;
- To the south by Central House residential apartments and Commerce House (offices);
- To the west by the Brighton Main Line (fully electrified passenger service but diesel freight and maintenance trains use it).

Figure 4.1: Site location plan



The site is not situated within or near an Air Quality Management Area (AQMA).

4.2 Proposed Development

The proposed development comprises the construction of a 7-storey building to facilitate 30 flats (18 x 1 bed and 12 x 2 bed) with associated landscaping, parking and refuse stores.

The transport consultant provided details of the annual average daily traffic (AADT) generated by the proposed development, stating that the development will result in a net decrease from the previous office use. The former office use produced 312 AADT, whereas the proposed 30 flat development will produce 63 AADT (using a 2.103 TRICS rate). Section 6.4 shows the trip generation in more detail. Due to the decrease of AADT associated with the site, it is expected to be beneficial to the local air quality. The development AADT does not exceed the IAQM criteria for further assessment.

The development will comprise ASHP for space and hot water heating and there will be 8 parking spaces, all of which will have EV charging facilities and three will be disabled spaces. The development will also include 33 secure cycle parking spaces, five of which will have E-bike charging points.

5 BASELINE CONDITIONS

5.1 Local Authority Monitoring Data

Reference has been made to the following information sources:

- i. MSDC 2025 Air Quality Annual Status Report (ASR) (published June 2025);
- ii. Horsham District Council (HDC) 2025 ASR (published July 2025);
- iii. Defra UK-Air¹¹
- iv. Air Quality England¹².

5.1.1 Automatic Monitoring

MSDC only operate one Continuous Monitoring Station (CMS) which is the roadside monitor located in East Grimstead, known as MSAQ43. It is located on London Road in an urban area, approximately 15 km to the northeast of the proposed site and monitors concentrations of NO₂ and PM₁₀. The nearest CMS is operated by Horsham District Council (HDC) located 11.8 km to the west of the site in the AQMA within Cowfold. Even though neither of these stations is representative of conditions at the site, they have both been summarised in Table 5.1 to indicate what concentrations are like in built-up urban areas and within an AQMA.

Table 5.1. Summary of CMS annual mean concentrations in proximity of the development site.

Name (Site ID)	Distance to site (direction)	Type	Pollutant	Annual mean concentrations (µg/m ³)					AQO
				2020	2021	2022	2023	2024	
Cowfold (HO5)	11.55 SW	Roadside	NO ₂	23.6	20.3	21.0	24.6	16.2	40
MSAQ43	14.00 NE	Roadside	NO ₂	-	-	24.3	21.1	18.7	
			PM ₁₀	-	-	18.8	17.0	16.3	40

Table 5.1 shows that annual mean concentrations of NO₂ and PM₁₀ have remained below the respective AQO since at least 2020 at the two nearest CMS. It is also important to note that pollutant concentrations at the proposed development site are expected to be substantially lower than those recorded at monitoring site HO5 and MSAQ43, as the site is not situated within an urban environment or an AQMA.

The latest ASRs show that the hourly mean concentrations of NO₂ have not exceeded 200 µg/m³ on more than the allowable 18 occasions permitted by the AQO at either CMS in recent years.

5.1.2 Diffusion Tube Monitoring

MSDC operates a diffusion tube network across the district to measure concentrations of NO₂. Several diffusion tubes in the vicinity of the proposed development are shown in Figure 5.1 and summarised in Table 5.1.

¹¹ Defra UK Air Website (accessed 18/05/26 via <https://uk-air.defra.gov.uk>)

¹² Air Quality in England Website (accessed on 18/05/26 via <https://airqualityengland.co.uk/>)

Figure 5.1: Diffusion tubes in proximity of the development site

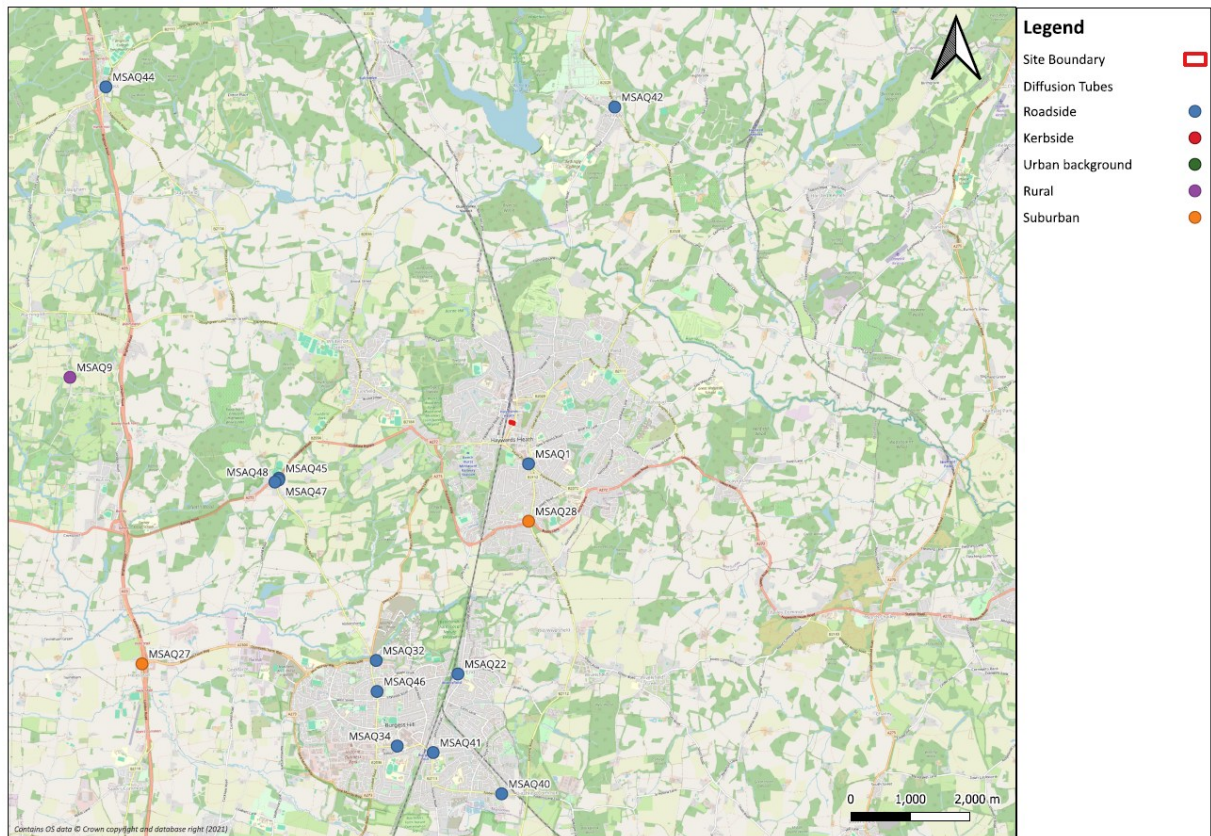


Table 5.1: Annual mean NO₂ concentrations from MSDC diffusion tube monitoring

Site Name (ID)	Distance and direction from site (km)	Type	Annual mean NO ₂ concentrations (µg/m ³)					AQO
			2020	2021	2022	2023	2024	
MSAQ1	0.70 S	Roadside	12.7	14.8	14.4	12.9	12.3	40
MSAQ28	1.63 S	Suburban	22.2	22.4	24.5	21.4	21.0	
MSAQ45	3.97 W	Roadside	N/A	N/A	N/A	35	32.6	
MSAQ47	3.98 W	Roadside	N/A	N/A	N/A	N/A	24.3	
MSAQ48	4.05 W	Roadside	N/A	N/A	N/A	N/A	13.2	
MSAQ22	4.27 S	Roadside	20.1	22.2	21.3	20.4	17.6	
MSAQ32	4.56 SW	Roadside	11.2	11.4	12.3	10.6	10.1	
MSAQ46	5.01 SW	Roadside	N/A	N/A	N/A	19.5	18	
MSAQ42	5.54 N	Roadside	N/A	21.4	20.6	18.6	18	
MSAQ41	5.65 S	Roadside	N/A	18.6	18.2	16.2	15.6	
MSAQ34	5.72 S	Roadside	19	19.6	18.7	16.9	15.9	
MSAQ40	6.18 S	Roadside	11.5	13.1	12.5	10.4	10.3	
MSAQ45	3.97 W	Roadside	N/A	N/A	N/A	35	32.6	

Table 5.1 shows that all diffusion tubes in the vicinity of the site stayed well within the AQO in recent years. The nearest diffusion tube (MSAQ1) is located adjacent to South Road (B2272), where relatively high traffic volumes and frequent braking and acceleration near the Sussex Square roundabout have the potential to worsen local air quality. However, monitored NO₂ concentrations at this location remain within the AQO.

5.2 DEFRA Background Maps

The UK-AIR background air pollutant concentration maps have also been considered. The background maps are presented in 1 km x 1 km grid squares across England, Wales, Scotland and Northern Ireland. The current version of the background maps (reference year 2021) contains estimates of NO_x, NO₂, PM₁₀ and PM_{2.5} for the period 2021 through to 2040.

The 2021 reference year background maps are based on monitoring and meteorological data for 2021. Predicted background concentrations for the reference year (2021) and current year (2026) are summarised in Table 5.2.

Table 5.2: Predicted annual mean background map concentrations for grid square centred at 533500, 124500

Pollutant	Annual Mean Concentration (µg/m ³)		
	2021	2026	AQO
NO ₂	8.24	7.35	40
PM ₁₀	9.99	9.57	40
PM _{2.5}	6.16	5.80	20

All predicted background concentrations in Table 5.2 indicate that the pollutant concentrations at the proposed development site are well within the respective AQO and have decreased from 2021 to 2026.

5.3 Summary

The proposed development is located within an urban location and local air quality is expected to be influenced to some extent by road traffic emissions from the surrounding road network. Following a review of published information sources, baseline concentrations of NO₂, PM₁₀ and PM_{2.5} are all assumed to be well within their respective long and short-term AQOs at the proposed development site, even at roadside locations where traffic levels are anticipated to be higher than those along Perrymount Road.

6 AIR QUALITY ASSESSMENT

6.1 Introduction

Developments can introduce new receptors into areas with poor air quality. They can also increase emissions of air pollutants during their construction and operational phases, and so these matters are assessed.

6.2 Site Suitability

The site is not situated within an AQMA, and the majority of future occupants are located over 45 m from the nearest significant source of pollution, the railway line. Perrymount Road is located over 60 m from the proposed building façade.

The proposed development comprises the construction of a seven-storey building containing 30 residential units with eight car parking spaces and 33 cycle parking spaces.

The Local Air Quality Management (LAQM) technical guidance (TG22) states that likely exceedances of the AQO should be assessed in relation to 'the quality of the air at locations which are situated outside of buildings or other natural or man-made structures, above or below ground, and where members of the public are regularly present.'

The focus is therefore on those locations where members of the public are likely to be regularly present and are likely to be exposed for a significant amount of time appropriate to the averaging period of the objective.

Research carried out on behalf of DEFRA¹³ concluded that exceedances of the 1-hour mean for NO₂ are unlikely to occur where the annual mean is below 60 µg/m³. As annual mean concentrations are expected to be below

¹³ AEA Energy and Environment (2008). 'Analysis of the relationship between annual mean nitrogen dioxide concentration and exceedances of the 1-hour mean AQO Objective'

60 µg/m³ in the vicinity and within the site, it can therefore be assumed that the short-term (1-hour) mean AQO is not at risk of being exceeded.

From the review of published information sources presented in Section 5, baseline concentrations of NO₂, PM₁₀ and PM_{2.5} are anticipated to be well within the respective annual mean and short-term AQOs at the proposed development site.

The site is therefore considered to be suitable for the proposed development from an air quality perspective. Detailed Assessment with dispersion modelling to inform site suitability is not considered to be required, as concentrations are not indicated to be over 90% of the AQO and trip generation of the development does not exceed the IAQM guidance.

6.3 Construction Phase

The Proposed Development has the potential to result in emissions of dust and PM₁₀ during the construction phase, prior to mitigation. The risk of impacts is assessed in Section 7, with recommended mitigation measures outlined in Section 8.

6.4 Operational Phase

6.4.1 Traffic Emissions

Detailed trips generation figures have been produced by the project's transport consultant, Crosby Transport Planning, and shows that the proposed development is anticipated to generate 63 (net decrease of 249 from the office use) daily vehicle movements, and therefore, a detailed assessment including dispersion modelling is not required. Consequently, there will be no significant impact on local air quality and as daily trips are expected to decrease, it is anticipated that the development will be beneficial to local air quality.

6.4.2 Building Emissions

The heating and hot water demand is intended to be met by ASHP. Consequently, the proposed development will not introduce any plant that emits significant NO_x or PM₁₀ concentrations.

6.5 Significance of Effects

The proposed development is in an area of suitable air quality, and there are no significant additional transport or building emissions to consider. Potential construction effects are mitigated through the dust management plan. The air quality effect of the proposed development is therefore considered as **"Not Significant"**.

7 CONSTRUCTION DUST RISK ASSESSMENT

7.1 Introduction

The purpose of this assessment is to identify the category of risk from dust emission associated with the demolition, earthworks, construction and track-out phases, and to put in place a suitable management and mitigation strategy, to ensure negative impacts and adverse effects are controlled and reduced.

The first step of the assessment is to conduct screening to establish if there is a need to proceed to detailed assessment. A dust risk assessment typically proceeds if there is a human receptor within 250 m of the boundary of the site or 50 m of the routes used by construction vehicles on the public highway, up to 250 m from the site entrances.

The IAQM guidance indicates that construction impacts on local air quality can be divided into four key areas;

- i. Demolition;
- ii. Earthworks;
- iii. Construction; and
- iv. Trackout.

7.2 Dust Emission Magnitude

The dust emission magnitude has been assessed for each of the four key areas above in relation to the Proposed Development. The dust emission magnitude is based on the scale of the anticipated works and is classified as small, medium, or large and is considered prior to mitigation. The following tables have been formatted to demonstrate the criteria that the development is within for the specific measure/detail.

7.2.1 Demolition

The proposed development does not comprise any demolition works and therefore, there is no dust risk associated with demolition.

7.2.2 Earthworks

Table 7.1 shows the IAQM criteria for assessing the dust emission magnitude for earthworks.

Table 7.1: Summary of IAQM criteria and development details for earthworks

IAQM Criteria				Development Details
Measure	Large	Medium	Small	
Total site area	> 110,000 m ²	18,000 m ² - 110,000 m ²	< 18,000 m ²	Approx. 1,900 m ²
Soil type	Potentially dusty soil type (e.g. clay)	Moderately dusty soil type (e.g. silt)	Large grain soil type (e.g. sand)	Bedrock: Upper Tunbridge Wells Sand – sandstone and siltstone, interbedded. Medium to low dust potential.
Heavy earth moving vehicles active at once	> 10	5-10	< 5	< 5
Height of bunds	> 6 m	3- 6 m	< 3 m	No bunds

The site is approximately 1,900 m² and it is understood that the existing hardstanding car park will be broken out and removed to allow space for the development. Due to the size and nature of the development, it is estimated that less than five heavy earth-moving vehicles will be active on the site at any given time, and it is not expected that any bunds will be positioned on site.

The British Geological Society (BGS) Open Geology of Britain Viewer indicates that the bedrock geology beneath the site is Upper Tunbridge Wells Sand (sand and siltstone). Sand and siltstone have a medium to low dust potential when dry.

The potential earthworks dust emission magnitude is considered to be ‘Small’.

7.2.3 Construction

Table 7.2 shows the IAQM criteria for assessing the dust emission magnitude for construction.

Table 7.2: Summary of IAQM criteria and development details for construction

IAQM Criteria				Development Details
Measure	Large	Medium	Small	
Total building volume	> 75,000 m ³	12,000 m ³ – 75,000 m ³	< 12,000 m ³	Approximately 7,000 m ³
Construction material	High dust potential and on-site concrete batching or sandblasting	Potentially dusty construction material such as concrete	Construction material with low dust potential (e.g. metal cladding or timber)	Brick and cladding, no concrete batching on site.

The proposed development comprises the construction of a 7-storey building with 30 residential dwellings which will result in a total building volume of < 12,000 m³ (estimated to be approximately 7,000 m³). It is expected that the building will be constructed of traditional brick.

The potential construction dust emission magnitude is considered to be ‘**Small**’.

7.2.4 Trackout

Table 7.3 shows the IAQM criteria for assessing the dust emission magnitude for trackout.

Table 7.3: Summary of IAQM criteria and development details for trackout

IAQM Criteria				Development Details
Measure	Large	Medium	Small	
HDV movements	> 50 HDV outward movements in any one day	20 – 50 HDV outward movements in any one day	< 20 HDV outward movements in any one day	< 20 HDV outward movements
Surface material	Potentially dusty surface material (e.g. high clay content)	Moderately dusty surface material (e.g. high clay content)	Surface material with low dust potential	Sand and siltstone. Medium to low dust potential
Unpaved road length	> 100 m	50 – 100 m	< 50 m	Existing hard standing surfaces to be used where available. Some areas of the site will use unpaved roads to access construction areas.

Trackout dust impacts are associated with HDVs leaving the site after moving over unpaved ground where they will accumulate mud and dirt that can then be tracked out onto the public roads. Trackout impacts are linked to the number of outward HDV movements in a day.

Due to the size of the site and the nature of the proposed development, the existing car park surface is anticipated to be broken out and removed where required to facilitate the works. Where existing areas of hardstanding can be retained, these are expected to be used for deliveries, material storage and construction traffic routes.

The retained hardstanding will provide defined routes for delivery vehicles and site traffic, reducing the need for vehicles to travel across unpaved areas. Although some work zones may still require access over exposed ground, the use of designated haul routes and retained hardstanding will minimise vehicle movements over bare earth. As a result, the potential for dust generation associated with trackout and vehicle movements across exposed ground is expected to be limited.

The potential dust emission magnitude in the absence of mitigation is considered to be ‘**Small**’.

7.2.5 Summary

A summary of the assessed dust emission magnitude, for individual construction activities is displayed in Table 7.4.

Table 7.4: Summary of the potential Dust Emission Magnitude

Phase	Dust Emission Magnitude
Demolition	N/A
Earthworks	Small
Construction	Small
Trackout	Small

7.3 Sensitivity of the Area

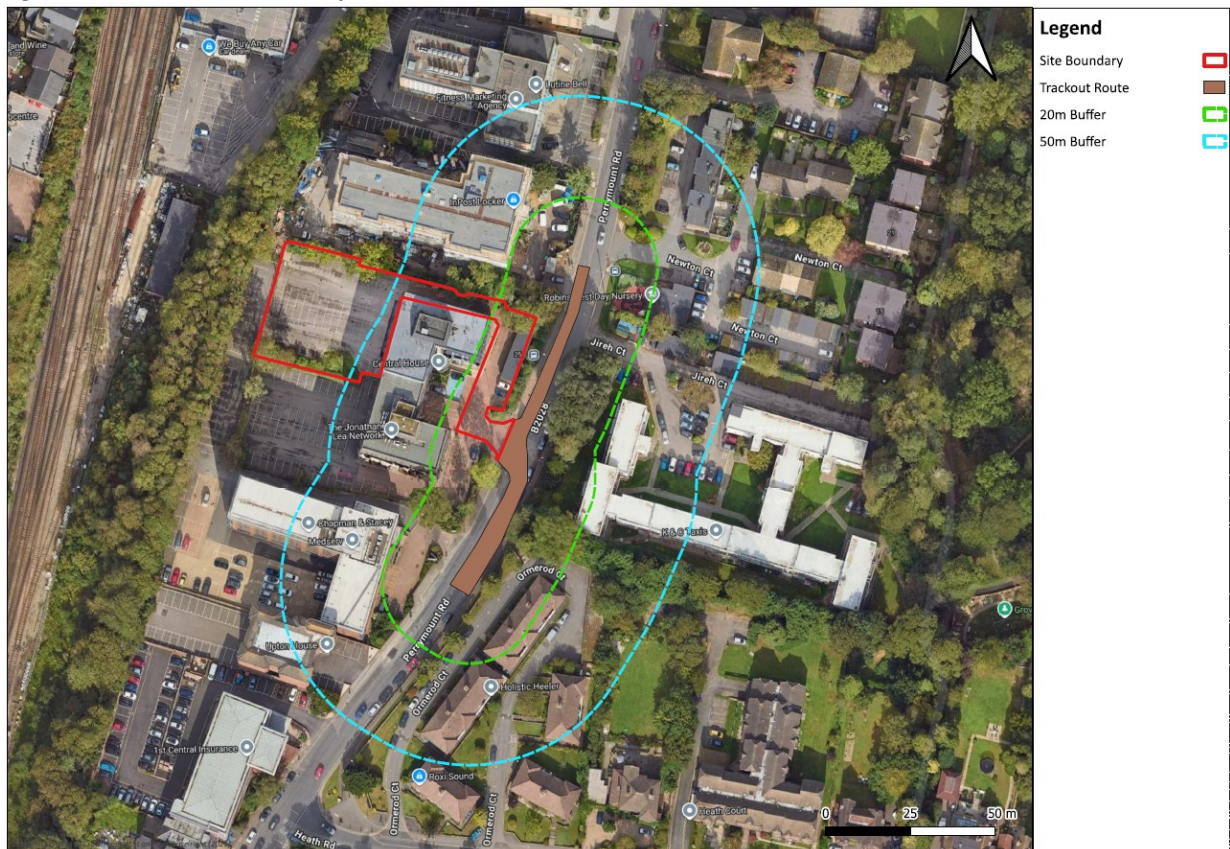
7.3.1 Introduction

The overall sensitivity of the area (as determined by the number and sensitivity of receptors within a given distance) is summarised in the following sections. Figure 7.1 and Figure 7.2 below, show the 20 m, 50 m and 100 m buffers from the site boundary and 20 m and 50 m buffers from the anticipated trackout route. Professional judgement has been applied, and therefore, for trackout impacts, the trackout route has been considered to be 50 m from the site exit, and receptors within 50 m of the anticipated routes for HDVs have been considered.

Figure 7.1: Distance buffers from the development site



Figure 7.2: Buffers from the anticipated trackout route



7.3.2 Dust Soiling Effects

The sensitivity of receptors to dust soiling effects is dependent upon the duration and frequency that people would expect to be exposed to the effects. Residential receptors can be expected to enjoy a high level of amenity, and background levels of dust soiling are expected to be low. It can be expected that dust soiling would diminish the aesthetics of their property, and such receptors are therefore assessed as being of high sensitivity. Residential properties, schools, nurseries and care homes are considered to be of high sensitivity for the purpose of this assessment.

Medium sensitivity receptors are those where users would expect to enjoy a reasonable level of amenity but would not reasonably expect to enjoy the same level of amenity as in their home or people or property would not reasonably be expected to be present here continuously or regularly for extended periods as part of the normal pattern of use of the land. Places of work and community uses are considered to be of medium sensitivity for the purpose of this assessment.

Low sensitivity receptors are those where the enjoyment of amenity would not reasonably be expected, or property would not reasonably be expected to be diminished in appearance, aesthetics or value by soiling. Exposure is of a transient nature and people or property would reasonably be expected to be present only for limited periods of time as part of the normal pattern of use of the land.

The consented residential development to the north of the site at 31 to 33 Perry Mount Road, planning reference DM/22/2303, has been assumed to be occupied for the purposes of this assessment.

The buildings closest to the site are residential and commercial properties, which are considered to be of high and medium sensitivity, respectively, with regard to dust soiling.

Figure 7.1 and Figure 7.2, shows there are over 100 high-sensitivity receptors located within 20 m of the site boundary and between 10-100 high-sensitivity receptors within 20 m the anticipated trackout route.

The sensitivity of the surrounding area with regards to dust soiling effects is therefore considered to be **'High'** with respect to activities undertaken on site and **'Medium'** along the trackout route.

7.3.3 Human Health

For health effects of PM₁₀, sensitivities are based on whether or not the receptor is likely to be exposed to elevated concentrations over a 24-hour period.

High-sensitivity receptors are those locations where members of the public are exposed over a time period relevant to the air quality objective for PM₁₀ (eight hours or more in a 24-hour period). Indicative examples include residential properties, hospitals, schools, nurseries and residential care homes.

Workers are considered to be of medium sensitivity for the purpose of this assessment and low sensitivity receptors are those locations where human exposure is transient e.g. public footpaths, playing fields, parks and shopping streets.

With reference to monitoring data presented in Section 5, annual mean concentrations of PM₁₀ are predicted to be below 24 µg/m³ in the vicinity of the site and it is predicted that over 100 high-sensitivity will be present within 20 m of the site and between 10-100 high-sensitivity receptors within 20 m of the anticipated trackout route.

Taking into account the number and sensitivity of receptors identified in the dust-soiling section above and assumed baseline concentrations of PM₁₀, the sensitivity of the surrounding area with regards to human health impacts with activities undertaken on site is **'Medium'** and along the trackout route is **'Low'**.

7.3.4 Ecological Effects

With reference to the Multi Agency Geographic Information for the Countryside (MAGIC) website¹⁴ there are no sensitive ecological sites within 50 m of the site or trackout route. Therefore, the ecological impact of the proposed development has not been considered further.

7.3.5 Summary

The sensitivity of the area surrounding the site is summarised in Table 7.5. For trackout impacts, receptors have been included up to 50 m from the site entrance and within 50 m of the anticipated routes for HDVs.

Table 7.5: Sensitivity of the Area

Receptor Sensitivity	Sensitivity of the Surrounding Area		
	Earthworks	Construction	Trackout
Dust soiling	High	High	High
Human health	Medium	Medium	Low
Ecological	N/A	N/A	N/A

7.4 Risk of Impacts

When the dust emission magnitude is combined with the sensitivity of the area, the risk of impacts with no mitigation applied can be determined. This determines the level of mitigation to be applied. The summary of the dust risk assessment is presented in Table 7.6.

¹⁴ www.magic.gov.uk (accessed 18/05/2026)

Table 7.6: Summary of Dust Risk Impacts

Summary	Earthworks	Construction	Trackout
Dust soiling	Low	Low	Low
Human health	Low	Low	Negligible

In summary, the site is considered as a ‘**Low Risk**’ during all phases for dust soiling effects, and a ‘**Low Risk**’ during earthworks and construction, and a ‘**Negligible Risk**’ for human health effects. The dust risk is used to define the amount of site-specific mitigation that is required. The mitigation measures are described in Section 8.

8 CONSTRUCTION MITIGATION MEASURES

8.1 Construction Phase

With reference to the IAQM guidance, the following measures in Table 8.1 form the dust management plan and are the IAQM recommended measures based on the risk assessment presented in Section 7:

Table 8.1: Dust Management Plan

Reference	Mitigation Measure	Notes
Communications		
CM1	Display the name and contact details of person(s) accountable for air quality and dust issues on the site boundary. This may be the environment manager/engineer or the site manager.	
CM2	Display the head or regional office contact information.	
CM3	Develop and implement a Dust Management Plan (DMP), which may include measures to control other emissions, approved by the Local Authority. The DMP may include monitoring of dust deposition, dust flux, realtime PM ₁₀ continuous monitoring and/or visual inspections.	Daily on-site inspections by site team.
Site Management		
SM1	Record all dust and air quality complaints, identify cause(s), take appropriate measures to reduce emissions in a timely manner, and record the measures taken.	
SM2	Make the complaints log available to the local authority when asked.	
SM3	Record any exceptional incidents that cause dust and/or air emissions, either on- or off-site, and the action taken to resolve the situation in the log book.	
Monitoring		
MT1	Undertake daily on-site and off-site inspection, where receptors (including roads) are nearby, to monitor dust, record inspection results, and make the log available to the local authority when asked. This should include regular dust soiling checks of surfaces such as street furniture, cars and window sills within 100 m of site boundary, with cleaning to be provided if necessary.	
MT2	Carry out regular site inspections to monitor compliance with the DMP, record inspection results, and make an inspection log available to the local authority when asked.	
MT3	Increase the frequency of site inspections by the person accountable for air quality and dust issues on site when activities with a high potential to produce dust are being carried out and during prolonged dry or windy conditions.	
MT4	Agree dust deposition, dust flux, or real-time PM ₁₀ continuous monitoring locations with the Local Authority. Where possible commence baseline monitoring at least three months before work commences on site or, if it a large site, before work on a phase commences.	
Preparing and maintaining the site		
PM1	Plan site layout so that machinery and dust causing activities are located away from receptors, as far as is possible.	
PM2	Erect solid screens or barriers around dusty activities or the site boundary that are at least as high as any stockpiles on site.	
PM3	Fully enclose site or specific operations where there is a high potential for dust production and the site is active for an extensive period.	
PM4	Avoid site runoff of water or mud.	
PM5	Keep site fencing, barriers and scaffolding clean using wet methods.	
PM6	Remove materials that have a potential to produce dust from site as soon as possible, unless being re-used on site. If they are being re-used on-site cover as described below.	

PM7	Cover, seed or fence stockpiles to prevent wind whipping.	
Operating vehicle/machinery and sustainable travel		
OV1	Ensure all on-road vehicles comply with the requirements of the London Low Emission Zone and the London NRMM standards.	Best practice but not required as not in the ULEZ
OV2	Ensure all vehicles switch off engines when stationary.	
OV3	Avoid the use of diesel or petrol powered generators and use mains electricity or battery powered equipment where practicable.	
OV4	Impose and signpost a maximum-speed-limit of 15 mph on surfaced and 10 mph on unsurfaced haul roads and work areas (if long haul routes are required these speeds 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).	
Operations		
OP1	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.	
OP2	Ensure an adequate water supply on the site for effective dust/particulate matter suppression/mitigation, using non-potable water where possible and appropriate.	
OP3	Use enclosed chutes and conveyors and covered skips.	
OP4	Minimise drop heights from conveyors, loading shovels, hoppers and other loading or handling equipment and use fine water sprays on such equipment wherever appropriate.	
OP5	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.	
Waste management		
WM1	Avoid bonfires and burning of waste materials.	
Earthworks		
EW1	No mitigation required due to low earthworks dust risk.	
Construction		
CS1	Avoid scabbling (roughening of concrete surfaces) if possible.	
CS2	Ensure sand and other aggregates are stored in bunded areas and are not allowed to dry out, unless this is required for a particular process, in which case ensure that appropriate additional control measures are in place.	
Trackout		
TO1	Use water-assisted dust sweeper(s) on the access and local roads, to remove, as necessary, any material tracked out of the site. This may require the sweeper being continuously in use.	
TO2	Avoid dry sweeping of large areas.	
TO3	Ensure vehicles entering and leaving sites are covered to prevent escape of materials during transport.	
TO4	Record all inspections of haul routes and any subsequent action in a site log book.	
TO5	Implement a wheel washing system (with rumble grids to dislodge accumulated dust and mud prior to leaving the site where reasonably practicable).	

8.2 Operational Phase

8.2.1 Introduction

Guidance on mitigating air quality impacts is provided in a document produced by the IAQM. The guidance emphasises that all developments should adopt good design principles to reduce emissions and minimise cumulative impacts regardless of the outcome of individual air quality assessments.

8.2.2 Proposed Operational Mitigation Measures

The site is located in an area where concentrations of all pollutants are expected to be well within the relevant AQOs. The site is considered to be suitable for development without the requirement for mitigation measures to reduce exposure.

The proposed development is anticipated to generate a decrease of AADT. Consequently, the development will not contribute any significant additional emissions to the local road network, and will reduce the number of traffic related emissions in comparison to the previous office use. EV charging spaces and cycle parking will be included within the design.

The heating and hot water demand for the scheme is anticipated to be met by ASHPs (non-combustion system). This approach ensures good air quality design is applied as minimal localised emissions of NOx or PM will be introduced, if any.

8.3 Summary

The overall effect on local air quality from the construction and operation of the proposed development is considered to be 'not significant' provided the construction mitigation measures in the dust management plan are in place.

9 EMISSIONS MITIGATION ASSESSMENT

In accordance with the published *Air Quality and Emission Mitigation Guidance for Sussex*, an emissions mitigation assessment has been carried out.

The emissions mitigation assessment provides a basis for quantifying the financial commitment required for offsetting potential development-generated emissions. The assessment calculates a damage cost by utilising the current DEFRA Emission Factor Toolkit (EFT) version 14.1¹⁵ to estimate annual road traffic emissions associated with the development generated traffic. The resulting annual emissions damage cost has then been calculated over a five year period in accordance with the Sussex guidance.

The calculation attributes a monetary value to those emissions using the figures per tonne outlined by Defra air quality damage cost guidance¹⁶.

The development is predicted to generate 63 daily movements, with 0% HGVs. The guidance follows the standard procedure of assuming an average trip distance of 10 km/trip and the average speed as 50 kph. The calculation was undertaken for both NOx and PM emissions for the base year of 2028 (estimated opening year). The road type 'urban (not London)' has been used within the EFT. The EFT input and output factors have been shown in Table 9.1.

Table 9.1: EFT input and output

Factor	Value
% HDV	0
AADT	63
Speed assumed (km/h)	50
Distance travelled	10 km
Year	2028 (estimated opening year)
Road type	Urban not London
EFT NOx Kg/Year	28.35815
EFT PM _{2.5} Kg/Year	4.02567

The central damage costs have been used for the emissions mitigation assessment, as these represent Defra's best estimate of the current evidence. Table 9.2 presents the damage cost per tonne, using the 2025 road transport damage cost values, and calculates the annual damage cost and total damage cost of the development over a 5 year period.

¹⁵ DEFRA Emissions Factor Toolkit version 14.1, May 2026. Accessed: <https://laqm.defra.gov.uk/air-quality/air-quality-assessment/emissions-factors-toolkit/>

¹⁶ DEFRA air quality appraisal: damage cost guidance, 2026. Accessed: <https://www.gov.uk/government/publications/assess-the-impact-of-air-quality/air-quality-appraisal-damage-cost-guidance>

Although baseline NO₂ and PM_{2.5} concentrations at the proposed development site and surrounding area are well below the relevant air quality objectives, the low damage cost values have not been used to determine the mitigation requirement. The low and high damage cost values are intended for sensitivity analysis only and have therefore not been used in the main calculation.

Table 9.2: Operational Emission damage costs for NO₂ and PM_{2.5} based on central damage cost

Kg/annum (2028)	Damage cost per tonne (2025 costs)	Damage cost 1 year £ (without mitigation)	Damage Cost 5 year £ (without mitigation)
NO _x 28.35815	£13,631 per tonne (road transport central)	£ 386.57	£ 1,932.83
PM _{2.5} 4.02567	£121,222 per tonne (road transport central)	£ 488.03	£ 3,440.12
5 Year Total (NO_x+PM_{2.5})	£ 4,372.95		

The total annual damage cost is £874.59 and over the five year assessment period, the total emissions mitigation value is £4,372.95.

The Air Quality and Emission Mitigation Guidance for Sussex provide standard mitigation measures that applies to all major developments:

- All gas-fired boilers to meet < 40 mg NO_x/kWh
- Provide one electric vehicle (EV) charging point per dwelling with dedicated parking or 1 charging point per 10 spaces (unallocated parking).

An emissions mitigation statement will be produced as part of a planning condition discharge and proposed mitigation to meet the agreed emissions damage costs. The cost of all the vehicle parking spaces being electric charging bays far exceeds the calculated damage costs and it should also be noted that the proposed development removes the office parking and leads to a reduction in traffic and emissions.

10 CONCLUSIONS

Anderson Acoustics Ltd was commissioned by the LTRO Perrymount Ltd to undertake an Air Quality Assessment for the proposed development at 25-27 Perrymount Road, Haywards Heath, RH16 3XL, Haywards Heath. The proposed development comprises the construction of a 7-storey building for 30 residential units.

The site is not situated within an AQMA, and baseline concentrations of monitored air pollutants are well below the annual and short-term AQOs based on a review of published data sources. No specific mitigation measures are considered necessary to reduce future occupants' exposure to air pollution, and the site is considered to be suitable for the proposed use.

There is a 'low risk' of dust soiling during all phases of construction and a 'low risk' for human health impacts during earthworks and construction and a 'negligible risk' during trackout, prior to the consideration of mitigation. Recommended mitigation measures are outlined in Table 8.1. With the proposed mitigation in place for the duration of the construction works, the overall effect on local air quality is judged to be 'not significant'.

The proposed development is expected to generate approximately 63 daily two way vehicle movements. The emissions damage cost for NO_x and PM_{2.5} over a five year period has been calculated to be £4,372.95 the cost of which is met by the additional electric vehicle charging provision. It is also noted that the proposed development removes the existing office parking spaces and leads to a substantial reduction in vehicle movements from the land use overall. The proposed development is expected to use ASHPs for heating and hot water, and the overall effect of the operational scheme on local air quality is judged to be not significant.

Accordingly, the proposed development is considered a suitable use of the site and compliant with relevant air quality policy and guidance.