

ENVIRONMENT

Frank Shaw Associates
Deighton SEMH School
Huddersfield
Air Quality Assessment

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Air Quality Assessment

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EXECUTIVE SUMMARY

BWB Consulting Limited was appointed by Frank Shaw Associates to undertake an air quality assessment for a proposed Social, Emotional and Mental Health School at land off Deighton Road, Huddersfield.

The Site is located within the administrative area of Kirklees Council. The Site is not located within an Air Quality Management Area, the closest is the Kirklees Air Quality Management Area, which is located approximately 1.1km north east of the Site.

A qualitative construction phase dust assessment was undertaken in accordance with Institute of Air Quality Management guidance and measures were recommended to minimise emissions during construction activities. With the implementation of these mitigation measures the impact of construction phase dust emissions was considered to be 'not significant' in accordance with Institute of Air Quality Management guidance.

Consideration was given to the West Yorkshire Low Emissions Strategy Technical Planning Guidance, and the development was categorised as a medium development. Therefore, an exposure assessment was undertaken but a detailed air quality impact assessment was not required.

The predicted trip generation for the proposed development was screened using the Institute of Air Quality Management and Environment Protection UK two stage screening process. The predicted trip generation exceeded the relevant screening criteria for when a detailed air dispersion modelling assessment is likely to be required for a development outside an Air Quality Management Area. However, once the additional vehicle trips are distributed onto the road network, the criteria was not exceeded on any one road link. Air quality impacts as a result of additional road traffic emissions associated with the Site were therefore considered to be 'not significant' in accordance with the Institute of Air Quality Management and Environment Protection UK guidance. A detailed air dispersion model was therefore not undertaken, this approach was agreed with Kirklees Council.

In accordance with the West Yorkshire Low Emissions Strategy Technical Planning Guidance, a medium development requires an exposure assessment. Monitoring data in the vicinity of the Site indicates that pollutant concentrations are below the current relevant air quality objectives for England. In addition, the Site is located away from any major road pollutant sources, therefore, it can be considered that pollutant concentrations at the Site are likely below current relevant air quality objectives for England. The proposed development was therefore considered to be suitable for the proposed sensitive use with regard to the current relevant air quality objectives for England.

As the proposed development was categorised as a medium development, Type 1 and 2 mitigation measures are required, in accordance with the West Yorkshire Low Emissions Strategy Technical Planning Guidance. The proposed development includes 14 Electric Vehicle charging points, and a Travel Plan, these development measures therefore adhere to the requirements of Type 1 and 2 mitigation measures.

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1. INTRODUCTION

- 1.1 BWB Consulting Limited (BWB) was instructed by Frank Shaw Associates (the Client) to undertake an air quality assessment for a proposed Social, Emotional and Mental Health (SEMH) School at land off Deighton Road, Huddersfield ('the Site').
- 1.2 The assessment considers construction phase dust impacts and operational phase road traffic emissions. A qualitative construction phase dust assessment was undertaken in accordance with relevant guidance. An operational phase road traffic emissions screening assessment was undertaken to consider the requirement for a detailed assessment of additional vehicles generated by the proposed development. In addition, a qualitative exposure assessment was undertaken in which pollutant concentrations were predicted across the Site to determine the suitability of the Site for the proposed sensitive use. The West Yorkshire Low Emissions Strategy (WYLES) Planning Technical Guidance was considered as part of the assessment.
- 1.3 This report is necessarily technical in nature so to assist the reader a glossary of air quality terminology can be found in **Appendix A**.

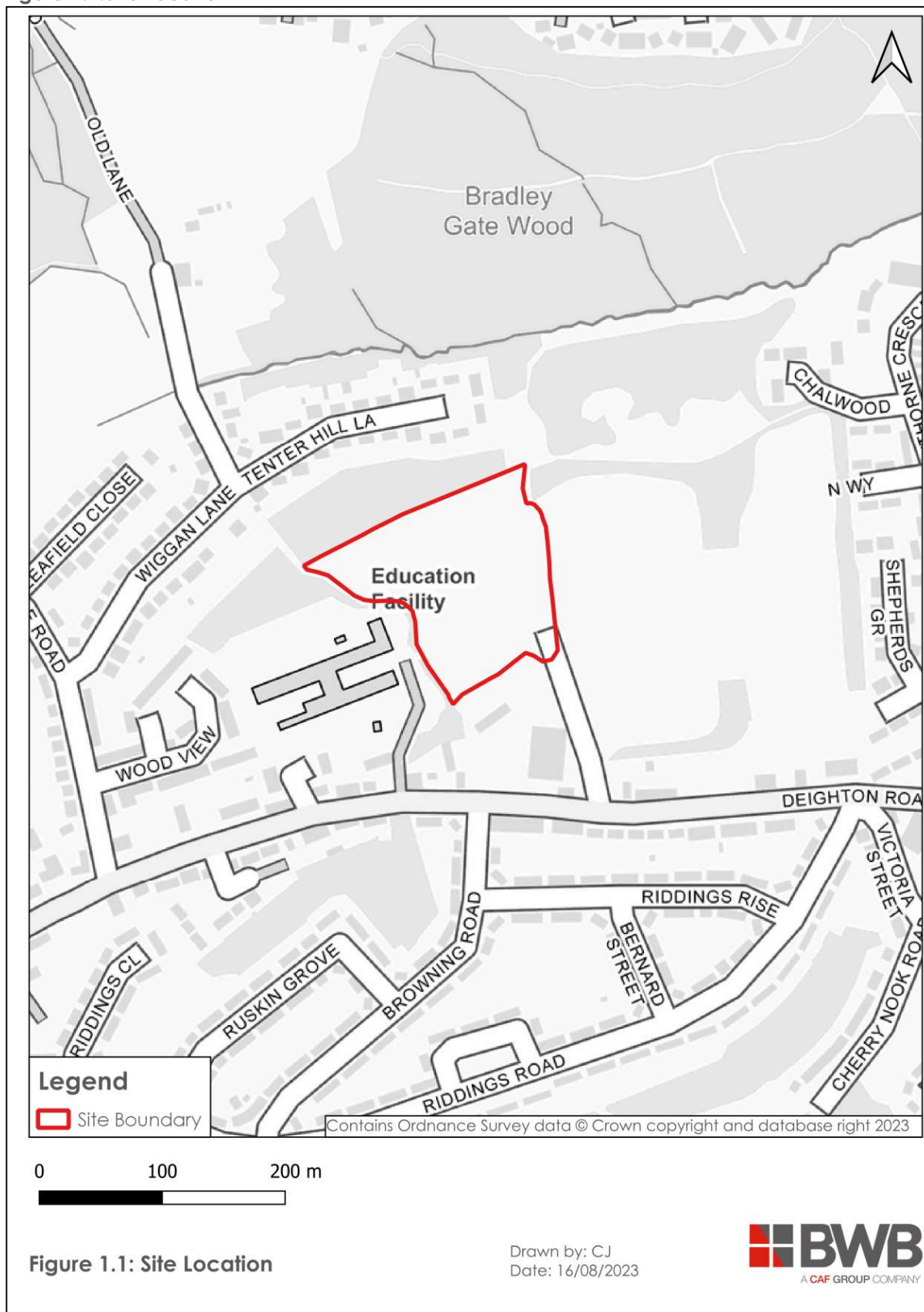
Site Setting

- 1.4 The Site is located off Deighton Road in Huddersfield and lies within the administrative area of Kirklees Council (KC). The Site currently comprises the former access road and parking areas of the Deighton Centre, which was demolished in 2013. The area that was once occupied by the Deighton Centre is now covered by open green space.
- 1.5 To the north of the Site lies woodland with residential dwellings located beyond. To the east are playing fields with residential dwellings located beyond. To the south lies residential dwellings and Deighton Sports Arena with Deighton Road located beyond. To the west lies the Christ Church CE Academy with residential dwellings located beyond.
- 1.6 **Figure 1.1** details the location of the proposed development.
- 1.7 Principal air pollution sources in the vicinity of the Site are likely to comprise road traffic emissions. The Site is not located within an Air Quality Management Area (AQMA); the closest AQMA is the Kirklees AQMA, which is located approximately 1.1km north east of the Site on the A62 Leeds Road.

Proposed Development

- 1.8 The proposed development comprises the construction of a Social, Emotional and Mental Health School, catering to children and young people with Special Educational Needs and Disabilities. The SEMH school will provide purpose-built facilities and will cater up to 132 pupils, the intake of which will comprise the relocation of SEMH pupils from the existing Joseph Norton Academy SEMH in Scissett, plus new pupils from the surrounding area. The proposed development masterplan is detailed in **Appendix B**.

Figure 1.1: Site Location



2. LEGISLATION, PLANNING POLICY & GUIDANCE

National Legislation and Planning Policy

2.1 The following national legislation and planning policy is relevant to air quality and was considered in the undertaking of the assessment. A summary of the relevant national legislation and planning policy is provided in **Appendix C**:

- European Parliament, EU 2008 ambient Air Quality Directive (2008)¹;
- HMSO, Air Quality (England) Regulations (2000)²;
- HMSO, Environment Act (1995)³;
- HMSO, Environment Act (2021)⁴;
- HMSO, Air Quality (England) Regulations (2002)⁵;
- HMSO, Air Quality Standards Regulations (2010)⁶;
- Department for Environment, Air Quality Strategy (1997)⁷;
- Department for the Environment, Food and Rural Affairs, Air Quality Strategy (2007)⁸;
- Department for the Environment, Food and Rural Affairs, Air Quality Strategy (2023)⁹;
- Department for the Environment, Food and Rural Affairs, The Environment (Miscellaneous Amendments) (EU Exit) Regulations (2020)¹⁰;
- HMSO, The Environmental Targets (Fine Particulate Matter) (England) Regulations (2023)¹¹;
- Ministry of Housing, Communities and Local Government, National Planning Policy Framework (NPPF) (2021)¹²; and
- Ministry for Housing, Communities and Local Government, Planning Practice Guidance (PPG) for air quality (2019)¹³.

Local Planning Policy

2.2 The following local planning policy was considered in the undertaking of the assessment and a summary is provided in **Appendix C**:

2.3 Kirklees Council: Kirklees Local Plan (2019) Kirklees Local Plan Strategy and Policies¹⁴.

¹ European Parliament (2008) Council Directive 2008/50/EC on Ambient Air Quality and Cleaner Air for Europe

² HMSO (2000) Statutory Instrument 2000 No. 928, The Air Quality (England) Regulations 2000 (as amended), London: HMSO

³ HMSO (1995) The Environment Act 1995, London: TSO

⁴ HMSO (2021) The Environment Act 2021, London: TSO

⁵ HMSO (2002) Statutory Instruments 2002 No. 3043, The Air Quality (England) (Amendment) Regulations 2002, London: HMSO

⁶ HMSO (2010) Statutory Instruments 2010 No. 1001 Air Quality Standards Regulations 2010. London: HMSO

⁷ Department of the Environment (DoE) (1997) The UK National Air Quality Strategy, London: HMSO

⁸ Department of the Environment, Food and Rural Affairs (Defra) (2007) The Air Quality Strategy for England, Scotland, Wales and Northern Ireland, London: HMSO

⁹ Department of the Environment, Food and Rural Affairs (Defra) (2023) The Air Quality Strategy for England, Scotland, Wales and Northern Ireland, London: HMSO

¹⁰ Department of the Environment, Food and Rural Affairs (Defra) (2020) The Environment (Miscellaneous Amendments) (EU Exit) Regulations, London: HMSO

¹¹ HMSO (2023) Statutory Instruments 2023 No. 96 The Environmental Targets (Fine Particulate Matter) (England) Regulations 2023

¹² Ministry of Housing, Communities & Local Government (2021) National Planning Policy Framework, HMSO London

¹³ Ministry for Housing, Communities and Local Government (2019) Planning Practice Guidance Air Quality

¹⁴ Kirklees Council (2019) Kirklees Local Plan

Air Quality Assessment Guidance

2.4 The following guidance was utilised in the air quality assessment:

- Defra, Local Air Quality Management Technical Guidance (LAQM.TG (22)) (2022)¹⁵;
- Institute of Air Quality Management, Guidance on the assessment of dust from demolition and construction (2023)¹⁶;
- Institute of Air Quality Management and Environmental Protection UK, Land-Use Planning and Development Control: Planning for Air Quality (2017)¹⁷;
- West Yorkshire Low Emissions Strategy (2016 – 2021)¹⁸; and
- West Yorkshire Low Emissions Strategy Technical Planning Guidance (2016 – 2021)¹⁹.

¹⁵ Defra (2022) Local Air Quality Management Technical Guidance LAQM.TG (22)

¹⁶ Institute of Air Quality Management (2023) Guidance on the assessment of dust from demolition and construction, Institute of Air Quality Management, London

¹⁷ Institute of Air Quality Management and Environmental Protection UK (2017) Land-Use Planning and Development Control: Planning for Air Quality

¹⁸ West Yorkshire Low Emissions Strategy Group (2016) West Yorkshire Low Emission Strategy

¹⁹ Kirklees Council (2016) West Yorkshire Low Emission Strategy: Air Quality & Emissions Planning Technical Guidance (2016 – 2021)

3. METHODOLOGY

Consultation with Kirklees Council

- 3.1 Consultation was undertaken with the Environmental Health Team at KC in which the proposed methodology was provided via email on the 10th August 2023 and a response was received on the 15th August 2023, agreeing the proposed methodology.
- 3.2 The scope of works, as agreed with KC, are detailed below:
- Construction Phase - A construction phase dust assessment was undertaken and relevant measures to mitigate construction phase dust emissions were recommended. The assessment was undertaken in accordance with guidance provided by the Institute of Air Quality Management (IAQM)¹⁶.
 - Operational Phase – Due to the location of the Site away from any major road sources and a review of local air quality monitoring data indicating that pollutant concentrations in the vicinity of the Site are below the current relevant air quality objective for England, it was agreed with KC that an impact screening assessment of road traffic emissions in accordance with the IAQM and Environmental Protection UK (EPUK) guidance¹⁷ was required. Furthermore, it was agreed that a qualitative exposure assessment to determine the suitability of the Site for the proposed sensitive use was also required.
 - WYLES Technical Planning Guidance¹⁸ was also considered as part of the assessment. The proposed development was classified as 'medium' and agreed with KC.
- 3.3 Full details of the methodology used in the assessment, as agreed with KC, are provided below.

Construction Phase Dust Assessment

- 3.4 An assessment of the potential impacts arising from the construction of the proposed development was undertaken in accordance with IAQM guidance¹⁶. The full assessment methodology is not reproduced within this report but a summary of the assessment steps are provided below:
- Step 1 – screen the requirement for a more detailed assessment. No assessment is required if there are no receptors within a certain distance of the works.
 - Step 2 – assess the risk of dust impacts separately for each of the four activities considered (demolition, earthworks, construction and trackout).
 - Step 2A – determine the potential dust emission magnitude for each of the four activities;
 - Step 2B – determine the sensitivity of the area;
 - Step 2C – determine the risk of dust impacts by combining the findings of steps 2A and 2B.
 - Step 3 – determine the site-specific mitigation for each of the four activities; and
 - Step 4 – examine the residual effects and determine significance.

Operational Phase Road Traffic Emissions – Screening Assessment

IAQM and EPUK

- 3.5 Guidance published by the IAQM and EPUK in 2017¹⁷ provides a two-stage approach to determine the level of assessment required in the consideration of the impact of development-generated road traffic emissions on local air quality.

Stage 1

- 3.6 The Stage 1 criteria requires that the assessment progress to Stage 2 if any of the following apply:
- The development comprises:
 - 10 or more residential units or a site area of more than 0.5ha; or
 - More than 1,000m² 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; or
 - The development will have a centralised energy facility or other centralised combustion process.

Note: Consideration should be given to the potential impacts of neighbouring sources on the site, even if an assessment of impacts of the development on the surrounding area is screened out.

Stage 2

- 3.7 The IAQM and EPUK guidance¹⁷ provides the following indicative criteria to determine whether a detailed road traffic emissions assessment is required for a proposed development.
- 3.8 The Stage 2 criteria relevant to the proposed development are:
- A change in Light Duty Vehicles (LDV) flow of more than 500 vehicles as a 24 hour Annual Average Daily Traffic (AADT) flow outside an AQMA, or a change of LDV flow of more than 100 vehicles as a 24 hour AADT flow within an AQMA; and
 - A change in Heavy Duty Vehicles (HDV) flow of more than 100 vehicles as a 24 hour AADT flow outside an AQMA, or a change of HDV flow of more than 25 vehicles as a 24 hour AADT flow within an AQMA.

WYLES Technical Planning Guidance

- 3.9 KC has adopted the WYLES Technical Planning Guidance¹⁹ which forms part of the WYLES¹⁸ and therefore the development classification process detailed in the WYLES Technical Planning Guidance¹⁹ was undertaken and mitigation measures recommended accordingly.
- 3.10 The WYLES Technical Planning Guidance¹⁹ provides a three step assessment process as follows:

- Step 1 – Development Type Classification
- Step 2 – Air Quality Impact Assessment
- Step 3 – Mitigation

3.11 This three-stage process was undertaken and the classification for the development was agreed with KC during the consultation process.

Assessment Criteria

3.12 Predicted pollutant concentrations were compared to the relevant current air quality objectives⁶ for England. The current relevant air quality standards and objectives are detailed in **Table 3.1**.

Table 3.1: Air Quality Standards and Objectives (England)

Pollutant	Averaging Period	Air Quality Objective (µg.m ⁻³)	Date to Achieve by
NO ₂	Annual Mean	40	31 December 2005
	1-hour mean not to be exceeded more than 18 times per year	200	31 December 2005
PM ₁₀	Annual Mean	40	31 December 2004
	24-hour mean not to be exceeded more than 35 times per year	50	31 December 2004
PM _{2.5}	Annual mean	20	1 January 2020
	<i>Annual mean interim target as detailed within the Environmental Improvement Plan²⁰</i>	12	<i>31 January 2028</i>
	<i>Annual mean</i>	10	<i>31 December 2040</i>

Italics denotes future air quality objectives published by the UK Government that will come into force in the future.

²⁰ Defra (2023) Environmental Improvement Plan 2023, First revision of the 25 Year Environment Plan

4. CONSTRUCTION PHASE DUST ASSESSMENT

- 4.1 The construction phase of the proposed development will involve a number of activities which have the potential to impact on local air quality. These include emissions of dust generated through excavation, construction, earthworks and trackout activities, exhaust pollutant emissions from construction traffic on the local highways network, and exhaust emissions from non-road mobile machinery (NRMM) within the construction site itself.
- 4.2 The location of sensitive receptors in relation to construction activities will affect the potential for such construction activities to cause dust soiling, nuisance and local air quality impacts. Meteorological conditions and the use of control measures will also contribute to the effects experienced.

Step 1: Screen the Need for a Detailed Assessment

- 4.3 Step 1 of the IAQM guidance¹⁶ involves a screening assessment to consider whether a more detailed construction phase dust assessment is required.
- 4.4 In accordance with the guidance, a detailed assessment is required if:
- Human receptors are located within 250m of the boundary of the site or 50m of routes used by construction vehicles on the public highways, up to 250m from the site entrances; or
 - Ecological receptors are located within 50m of the boundary of the site or 50m of routes used by construction vehicles on the public highways, up to 250m from the site entrances.
- 4.5 From a review of the Multi Agency Geographic Information for the Countryside (MAGIC) website²¹, no ecological designations were identified within the above screening distance and therefore the impact on ecological designations was not considered further. However human receptors are located within the above screening distances, with the closest of these receptors located off Deighton Road. A construction phase assessment was therefore undertaken.

Step 2: Assess the Risk of Dust Impacts

Step 2A: Define the Potential Dust Emission Magnitude

- 4.6 The dust emission magnitudes for the construction activities were defined using the criteria detailed in the IAQM guidance¹⁷ as detailed in **Table 4.1**. Demolition is not proposed as part of the development and therefore wasn't considered further in the assessment.

²¹ Defra, Multi Agency Geographic Information for the Countryside (MAGIC) [<http://magic.defra.gov.uk/>]

Table 4.1: Dust Emission Magnitude Criteria and Definition

Activity	IAQM Dust Emission Magnitude	IAQM Dust Emission Magnitude Criteria
Earthworks	Large	Total site area >110,000 m ² , potentially dusty soil type (e.g. clay, which will be prone to suspension when dry due to small particle size), >10 heavy earth moving vehicles active at any one time, formation of bunds >6 m in height.
	Medium	Total site area 18,000 m ² – 110,000 m ² , moderately dusty soil type (e.g. silt), 5-10 heavy earth moving vehicles active at any one time, formation of bunds 3m - 6m in height.
	Small	Total site area <18,000 m ² , soil type with large grain size (e.g. sand), <5 heavy earth moving vehicles active at any one time, formation of bunds <4 m in height.
Construction	Large	Total building volume >75,000 m ³ , on site concrete batching, sandblasting;
	Medium	Total building volume 12,000 m ³ – 75,000 m ³ , potentially dusty construction material (e.g. concrete), on site concrete batching.
	Small	Total building volume <12,000 m ³ , construction material with low potential for dust release (e.g., metal cladding or timber).
Trackout	Large	>50 HDV (>3.5t) outward movements in any one day, potentially dusty surface material (e.g. high clay content), unpaved road length >100 m.
	Medium	20 -50 HDV (>3.5t) outward movements in any one day, moderately dusty surface material (e.g. high clay content), unpaved road length 50m – 100m.
	Small	<20 HDV (>3.5t) outward movements in any one day, surface material with low potential for dust release, road length <50 m.

4.7 The following dust emissions magnitudes were defined for the proposed development:

- Earthworks – the total Site area is between 18,000m² - 110,000m², therefore the dust emission magnitude was defined as '**Medium**'.
- Construction – the total building volume is between 12,000m³ – 75,000m³, therefore the dust emission magnitude for construction was defined as '**Medium**'.
- Trackout – due to the scale of the proposed development, there is anticipated to be below 20 HDV outward movements in any one day during the construction phase. Therefore, the dust emissions magnitude for trackout was defined as '**Small**'. A trackout distance of up to 50m was used from the Site access on Deighton Road, in accordance with the IAQM guidance¹⁶.

4.8 A summary of the defined dust emissions magnitudes for the development are provided in **Table 4.2**.

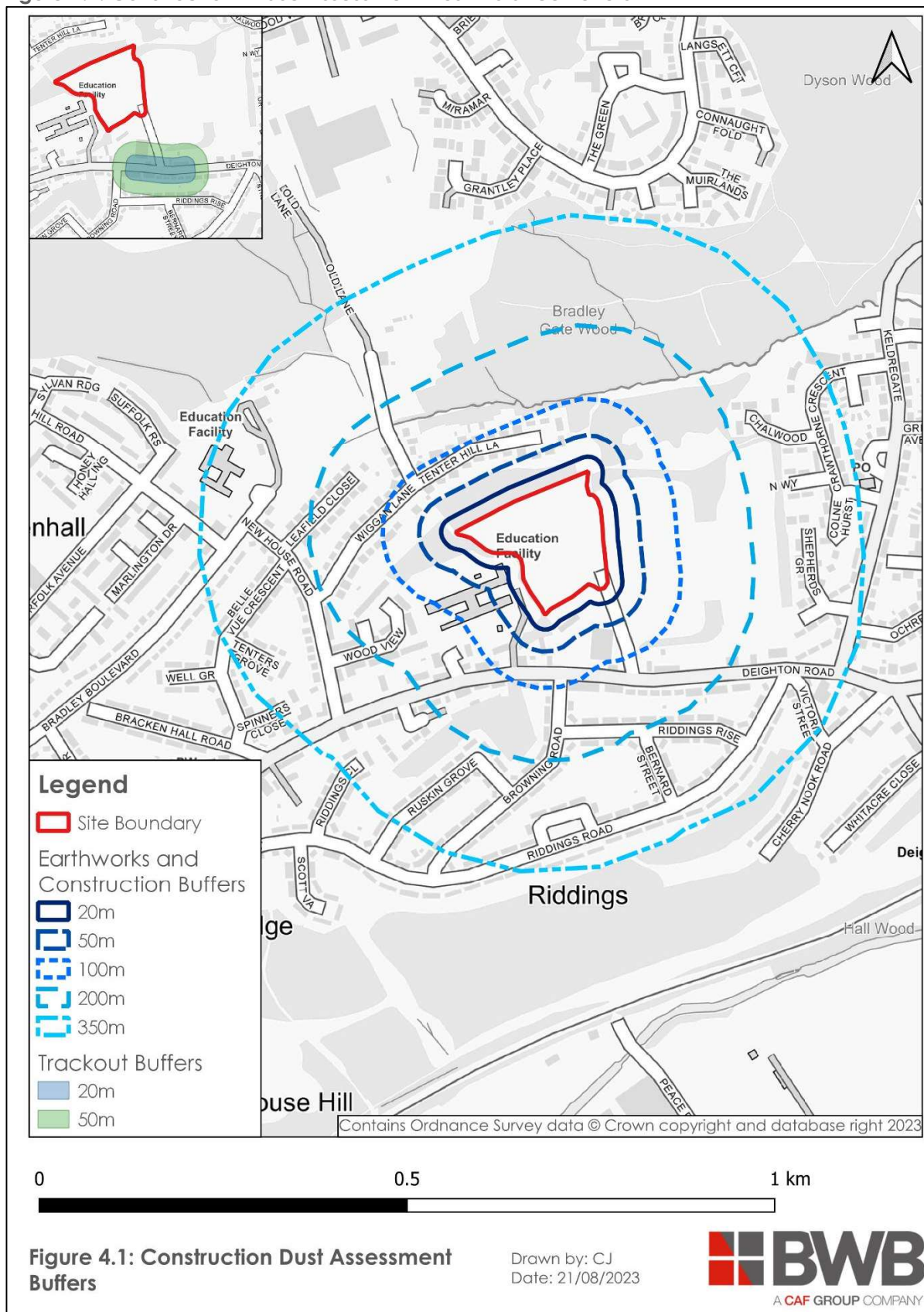
Table 4.2: Summary of Project Defined Dust Emissions Magnitudes

Activity	Dust Emissions Magnitude
Earthworks	Medium
Construction	Medium
Trackout	Small

Step 2B: Define the Sensitivity of the Area

- 4.9 The assessment requires the determination of the sensitivity of the area for the purposes of dust soiling and human health. The sensitivity of the study area takes into account the specific receptors in the vicinity of the Site, the proximity and number of those receptors, the local background concentration of PM₁₀ and site-specific factors. **Figure 4.1** was utilised to determine the number of receptors located within the distance bands provided in the IAQM guidance¹⁶ for determining receptor sensitivity.

Figure 4.1: Construction Phase Assessment Dust Distance Buffers



4.11 The sensitivity of the area is defined below, in accordance with IAQM criteria¹⁶ and summarised in **Table 4.3**.

- Dust Soiling – there are potentially over 100 highly sensitive human receptors associated with the Christ Church CE Academy located within 20m of the proposed Site boundary. In addition, there are 10 – 100 existing highly sensitive residential receptors and one short – medium stay car park with 1 – 10 parking spaces which are to be considered highly sensitive receptors, located within 20m of the assumed roads used by construction traffic. Therefore, the sensitivity of the area to dust soiling from earthworks, construction and trackout activities was defined as '**High**'.
- Human Health – there are potentially over 100 highly sensitive receptors associated with the Christ Church CE Academy located within 20m of the proposed Site boundary. In addition, there are 10 – 100 existing highly sensitive residential receptors located within 20m of the assumed roads used by construction traffic. As detailed in the Defra background mapping data²² the background PM₁₀ concentration at the Site is 12.0µg.m⁻³ for the current year of 2023 and therefore the sensitivity of the area to human health impacts was defined as '**Medium**'.

Table 4.3: Determination of the Sensitivity of the Area

Potential Impact	Sensitivity		
	Earthworks	Construction	Trackout
Dust Soiling	High	High	High
Human Health	Medium	Medium	Medium

Step 2C: Define the Risk of Impacts

4.12 The dust emission magnitude determined in Step 2A is then combined with the sensitivity of the area determined in Step 2B to define the risk of dust impacts with no mitigation applied. The results of this assessment are detailed in **Table 4.4**.

Table 4.4: Summary Dust Risk Table to Define Site Specific Risk

Activity	Step 2A: Dust Emission Magnitude	Step 2B: Sensitivity of the Area	Step 2C: Risk of Dust Impacts
<i>Dust Soiling Effects on People and Property</i>			
Earthworks	Medium	High	Medium Risk
Construction	Medium	High	Medium Risk
Trackout	Small	High	Low Risk
<i>Human Health Impacts</i>			

²² Department for Environment, food and Rural Affairs (2018) Background Mapping data for local authorities

Activity	Step 2A: Dust Emission Magnitude	Step 2B: Sensitivity of the Area	Step 2C: Risk of Dust Impacts
Earthworks	Medium	Medium	Medium Risk
Construction	Medium	Medium	Medium Risk
Trackout	Small	Medium	Negligible

Step 3: Site-Specific Mitigation

- 4.13 The risk of dust impacts, defined in Step 2C of the assessment, is used to determine the mitigation measures required to minimise the emission of dust during construction phase activities. The IAQM guidance¹⁶ provides details of highly recommended and desirable mitigation measures which are commensurate with the risk of dust impacts defined in Step 2C for construction, earthworks and trackout activities. Where the mitigation measures are general in nature, the highest risk category was applied in accordance with the guidance¹⁶. The highest risk category identified was 'Medium Risk' and the recommended mitigation taken from the IAQM guidance¹⁶ is detailed in **Table 4.5** and **Table 4.6**.

Table 4.5: Mitigation Measures for a Medium Risk Site

Category	Mitigation Measures for a Medium Risk Site	
	Highly Recommended	Desirable
Communication	Develop and implement a stakeholder communications plan that includes community engagement before work commences on site.	None
	Display the name and contact details of person(s) accountable for air quality and dust issues on the site boundary. This may be the environmental manager/engineer or the site manager.	
	Display the head or regional office contact information.	
	Develop and implement a Dust Management Plan (DMP), which may include measures to control other emissions, approved by the Local Authority.	
Site Management	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.	None
	Make the complaints log available to the local authority when asked.	
	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.	

Category	Mitigation Measures for a Medium Risk Site	
	Highly Recommended	Desirable
Monitoring	Carry out regular site inspections to monitor compliance with the DMP, record inspections results, and make an inspection log available to the local authority when asked.	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 100m of the site boundary, with cleaning to be provided as necessary.
	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.	
Preparing and maintaining the site	Plan the site layout so that machinery and dust causing activities are located away from receptors, as far as is possible.	None
	Erect solid screens or barriers around dusty activities or the site boundary that are at least as high as any stockpiles on site.	
	Fully enclose site or specific operations where there is a high potential for dust production and the site is active for an extended period.	
	Avoid site runoff of water or mud.	
	Keep site fencing, barriers and scaffolding clean using wet methods.	
	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.	
	Cover, seed or fence stockpiles to prevent wind whipping.	
Operating vehicle/ machinery and sustainable travel	Ensure all vehicles switch off engines when stationary – no idling vehicles.	Impose and signpost a maximum-speed-limit of 15 mph on surfaced and 10 mph on un-surfaced haul roads and work areas (if long haul routes are required these speeds may be increased with suitable control measures provided, subject to the approval of the nominated undertaker and with the agreement of the local authority, where appropriate).
	Avoid the use of diesel or petrol powered generators and use mains electricity or battery powered equipment where practicable.	Implement a Travel Plan that supports and encourages sustainable travel (public transport, cycling, walking, and car-sharing).
	Produce a Construction Logistics Plan to manage the sustainable delivery of goods and materials.	

Category	Mitigation Measures for a Medium Risk Site	
	Highly Recommended	Desirable
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.	None
	Ensure an adequate water supply on site for effective dust/particulate matter suppression/mitigation, using non-potable water where possible and appropriate.	
	Use enclosed chutes and conveyors and covered skips.	
	Minimise drop heights from conveyors, loading shovels, hoppers and other loading or handling equipment and use fine water sprays on such equipment wherever appropriate.	
	Ensure equipment is readily available on site to clean and dry spillages, and clean up spillages as soon as reasonably practicable after the event using wet cleaning methods.	
Waste Management	Avoid bonfires and burning of waste materials.	None

Table 4.6: Mitigation Measures Specific to Earthworks, Construction and Trackout

Category	Mitigation Measures	
	Highly Recommended	Desirable
Earthworks (Medium Risk Site)	None	Re-vegetate earthworks and exposed areas/soil stockpiles to stabilise surfaces as soon as practicable.
		Use Hessian, mulches or tackifiers where it is not possible to re-vegetate or cover with topsoil, as soon as practicable.
		Only remove the cover in small areas during work and not all at once.
Construction (Medium Risk Site)	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.	Avoid scabbling (roughening of concrete surfaces) if possible.
		Ensure bulk cement and other fine powder materials are delivered in enclosed tankers and stored in silos with suitable emission control systems to prevent escape of material and overfilling during delivery.
		For smaller supplies of fine powder materials ensure bags are sealed after use and stored appropriately to prevent dust.
Trackout (Low Risk Site)	None	Use water-assisted dust sweeper(s) on the access and local roads, to remove, as necessary, any materials tracked

Category	Mitigation Measures	
	Highly Recommended	Desirable
		out of the site. This may require the sweeper being continuously in use.
		Avoid dry sweeping of large areas.
		Ensure vehicles entering and leaving the sites are covered to prevent escape of materials during transport.
		Record all inspections of haul routes and any subsequent action in a site log book.
		Implement a wheel washing system (with rumble grids to dislodge accumulated dust and mud prior to leaving the site where reasonably practicable).

Step 4: Determine Significant Effects

- 4.14 In accordance with IAQM guidance¹⁶, with the implementation of the mitigation measures detailed in Step 3, the residual impacts from the construction phase are considered to be 'not significant'.

5. OPERATIONAL PHASE ROAD TRAFFIC EMISSIONS SCREENING ASSESSMENT

- 5.1 Consideration was given to both the potential impacts associated with additional development-generated vehicles on local air quality and the suitability of the Site for the proposed sensitive use with regard to the current relevant air quality objectives for England⁶.

West Yorkshire Low Emissions Strategy Technical Planning Guidance

- 5.2 KC has adopted the WYLES Technical Planning Guidance¹⁹ which forms part of the WYLES¹⁸. The four-step process detailed in the guidance¹⁹ was therefore undertaken.

Step 1 - Development Type Classification

- 5.3 The proposed development is for non-residential educational use with more than 1,000m² of floor space proposed. Therefore, the proposed development meets the criteria for a 'medium' development in accordance with the WYLES Technical Planning Guidance¹⁹ but does not meet any of the additional criteria for a 'major' development. The proposed development was therefore classified as 'medium'.

Step 2 – Air Quality Impact Assessment

- 5.4 For developments that are classified as 'medium', an exposure assessment is required to be undertaken to determine the suitability of the Site for the proposed sensitive end use, in accordance with the WYLES Technical Planning Guidance¹⁹. The Site is not located close to any major road sources and monitoring data in the area is below the current air quality objectives for England, as detailed in **Table 5.1**. A qualitative exposure assessment was therefore undertaken, as agreed with KC.

Impact Screening Assessment

IAQM and EPUK Guidance

- 5.5 The trip generation for the proposed development was screened using IAQM and EPUK Stage 1 and Stage 2 criteria¹⁷ to determine whether a detailed air quality assessment was required.

Stage 1

- 5.6 The proposed development comprises more than 1,000m² of floor space and proposes more than 10 parking spaces; it was therefore necessary to proceed to Stage 2.

Stage 2

- 5.7 The trip generation for the proposed development was provided by BWB Consulting Ltd, the Transport Consultants for the project. The development proposals will generate an additional 556 LDVs and 0 HDVs, as a 24-hour AADT flow. This is above the screening

criteria detailed in the IAQM and EPUK guidance¹⁷ of 500 LDVs as a 24-hour AADT flow for development outside an AQMA. It was confirmed by the project transport consultant that the predicted trip generation is distributed 73 LDVs west and 483 LDVs east as 24-hour AADT flow on Deighton Road. Therefore, the predicted trip generation does not exceed the screening criteria thresholds provided in the IAQM and EPUK¹⁷ guidance of 500 LDVs and 100 HDVs as a 24-hour AADT outside an AQMA.

- 5.8 The Site is not located within an AQMA, however, sections of the Kirklees AQMA are located approximately 1.1km north east along the A62 Leeds Road. The predicted trip generation was provided by the project transport consultant for the A62 Leeds Road within the Kirklees AQMA. The predicted trip generation along the A62 is 123 LDVs as a 24-hour AADT flow, which exceeds the lower screening criteria of more than 100 vehicles as a 24 hour AADT flow inside an AQMA, as detailed in the IAQM and EPUK guidance¹⁷.
- 5.9 A review of local monitoring data was undertaken to determine the likely impact that the additional 23 trips would have of air quality in the vicinity of the Site. 2022 monitoring data was not available at the time of writing of the assessment. 2020 and 2021 monitoring data was available for review, however air quality monitoring undertaken in 2020 and 2021 is not considered representative of normal conditions due to the influence of COVID-19 lockdown restrictions on road traffic levels. In accordance with the IAQM Position Statement²³, 2019 monitoring data should be treated as the last year of 'normal' monitoring data until such time that the impact of lockdown restrictions on pollutant concentrations is more fully understood.
- 5.10 Bias adjusted Nitrogen Dioxide (NO₂) monitoring results, for the locations in the vicinity of the Site, are detailed in **Table 5.1**.

Table 5.1: KC NO₂ Monitoring Data in 2015 – 2021

Site ID	X, Y	Site Monitoring Type	Distance from and direction	Monitored Annual Average Concentration (µg.m ⁻³)						
				2015	2016	2017	2018	2019	2020	2021
K104	415810, 420554	Roadside	920m north east	-	-	-	-	-	17.4	19.9
K10	417227, 420337	Roadside	1.2km north east	42.1	46.7	37.3	39.3	34.5	28.8	-
K25, K26, K27	417255, 420360	Other	1.2km north east	20.3	-	26.4	30.4	27.4	22.6	24.5
K12	417335, 420412	Roadside	1.3km north east	42.6	43.4	36.1	33.9	31.4	23.0	28.2

²³ Institute of Air Quality Management (2021) Position Statement: Use of 2020 and 2021 Monitoring Datasets

Site ID	X, Y	Site Monitoring Type	Distance from and direction	Monitored Annual Average Concentration ($\mu\text{g.m}^{-3}$)						
				2015	2016	2017	2018	2019	2020	2021
K9	417280, 420482	Kerbside	1.3km north east	39.2	36.6	35.3	27.5	34.4	28.3	21.7
K22	417424, 420490	Kerbside	1.4km north east	43.4	40.0	41.4	40.6	33.4	22.7	34.7
K6	417872, 421050	Roadside	2.1km north east	38.9	40.4	42.6	36.3	37.9	27.0	34.9

- data not available

- 5.11 The monitored concentrations detailed in **Table 5.1** fluctuated over recent years, however, in 2019, the majority of monitoring locations recorded a decrease in concentrations from 2018, with the exception of the K9 and K6 diffusion tubes. Furthermore, all monitoring locations located within the Kirklees AQMA on the A62 Leeds Road recorded concentrations below the current air quality objective for England of $40\mu\text{g.m}^{-3}$ in 2019. Monitored concentrations at the K10 diffusion tube, the closest monitoring location to the Site with available 2019 data were less than 87% of the current air quality objective for England in 2019. The K10 diffusion tube is also recording the highest NO_2 concentrations in that section of the Kirklees AQMA, therefore all other tubes within the section of the AQMA are less than 87% of the current air quality objective for England in 2019. As such, it was considered unlikely that the additional 23 LDV trips above the IAQM/EPUK criteria¹⁷ would lead to an exceedance of the current annual mean NO_2 objective for England. Therefore, the impact on local air quality as a result of the road traffic associated with the proposed development is considered to be not significant and a detailed air quality assessment was therefore not carried out.

Exposure Assessment

- 5.12 The proposed development was classified as 'medium' in accordance with the WYLES technical planning guidance¹⁹. As such an exposure assessment was undertaken through a review of local air quality monitoring data, as agreed by KC.
- 5.13 As is detailed in **Table 5.1**, local monitoring data in the vicinity of the Site fluctuated in recent years, however, in 2019, the majority of monitoring locations recorded a decrease in NO_2 concentrations from 2015 and were below the current annual mean NO_2 objective for England.
- 5.14 KC does not undertake monitoring of PM_{10} within its administrative boundary. KC undertakes $\text{PM}_{2.5}$ monitoring at two automatic monitoring locations in its administrative area. The closest of the two is located approximately 1.5km north east of the Site on the A62 Leeds Road. This monitoring location recorded $\text{PM}_{2.5}$ concentrations of $12.2\mu\text{g.m}^{-3}$ in 2020, this monitored concentration is below the current $\text{PM}_{2.5}$ air quality objective for England of $40\mu\text{g.m}^{-3}$ considerably. However, in accordance with the IAQM position

statement²³ regarding monitoring uncertainty in 2020 and 2021 datasets due to COVID-19, 2019 monitoring data is treated as the last year of typical monitoring data. Monitoring data at this monitoring location was therefore not considered further.

- 5.15 Given the Site is not located within the Kirklees AQMA and is not situated adjacent to a main A-Road, it can be considered that NO₂, PM₁₀ and PM_{2.5} concentrations at the Site are likely to be below the monitored pollutant concentrations and are below the current relevant air quality objectives for England⁷. The Site was therefore considered to be suitable for the proposed end use with regard to the current relevant air quality objectives for England⁶.

Development Proposals

Step 3 – Mitigation and Compensation

- 5.16 The proposed development was classified as 'medium' and therefore Type 1 and 2 mitigation is required in accordance with the WYLES Technical Planning Guidance¹⁹ to minimise the impact of the proposed development on local air quality.
- 5.17 Type 1 mitigation required as part of the WYLES Planning Technical Guidance¹⁹ requires that 10% of parking spaces are to be Electric Vehicle (EV) charging spaces which may be phased with 5% initial provision and the remainder at an agreed trigger level. Example measures of Type 2 mitigation measures detailed in the WYLES Planning Technical Guidance¹⁹ include the following:
- Travel Plan including agreed mechanisms for discouraging high emission vehicle use and encouraging modal shift (i.e. public transport, cycling and walking) as well as the uptake of low emission fuels and technologies;
 - Improved pedestrian links to public transport stops;
 - Provision of new bus stops infrastructure including shelters, raised kerbing, information displays;
 - Provision of subsidised or free ticketing (Corporate and residential Metrocards, Student Metrocards);
 - Site layout to include improved pedestrian pathways to encourage walking; and
 - Improved convenient and segregated cycle paths to link to local cycle network.
- 5.18 It is understood that there will be a total of 117 car parking spaces, of these spaces 12 will have EV charging points, which meets the Type 1 mitigation criteria. A Travel Plan is also to be submitted as part of the development proposals. These development measures therefore adhere to the requirements of Type 1 and 2 mitigations measures as outlined in the WYLES Technical Planning Guidance¹⁹. Additional development measures that benefit air quality are proposed as part of the development proposals, these include a proposed energy strategy that will include heating and hot water generated by low energy air source heat pumps and electricity generation provided by photovoltaic panels.

6. CONCLUSION

- 6.1 An air quality screening assessment was undertaken for a proposed Social, Emotional and Mental Health School at land off Deighton Road, Huddersfield.
- 6.2 A qualitative construction phase assessment was undertaken, and measures were recommended to minimise emissions during construction activities. With the implementation of these mitigation measures the impact of construction phase dust emissions is considered to be 'not significant' in accordance with IAQM guidance¹⁶.
- 6.3 Consideration was given to the WYLES Planning Technical Guidance¹⁹, and the development was categorised as a 'medium' development. Therefore, an exposure assessment was required but a detailed air quality impact assessment was not required.
- 6.4 The predicted trip generation for the proposed development was screened using the IAQM and EPUK¹⁷ two stage screening process. The predicted trip generation exceeded the relevant screening criteria for when a detailed air dispersion modelling assessment is likely to be required for a development outside an AQMA. However, once the additional vehicle trips are distributed onto the road network, the criteria was not exceeded on any one road link. Air quality impacts as a result of additional road traffic emissions associated with the Site were therefore considered to be 'not significant' in accordance with the IAQM and EPUK guidance¹⁷, a qualitative impact screening assessment was therefore undertaken.
- 6.5 In accordance with the WYLES Technical Planning Guidance¹⁹, a 'medium' development requires an exposure assessment. Upon agreement with KC, a qualitative Site suitability assessment was carried out and local air quality monitoring data was reviewed. Monitoring data in the vicinity of the Site recorded concentrations below the current relevant air quality objectives for England. In addition, the Site is located away from any major road pollutant sources, therefore, it can be considered that pollutant concentrations at the Site are likely below current relevant air quality objectives for England. The proposed development was therefore considered to be suitable for the proposed sensitive use with regard to the current relevant air quality objectives for England.
- 6.6 The proposed development was categorised as a medium development and therefore Type 1 and 2 mitigation measures are required, in accordance with the WYLES Technical Planning Guidance¹⁹. The proposed development includes 14 Electric Vehicle charging points, and a Travel Plan, these development measures therefore adhere to the requirements of Type 1 and 2 mitigation measures outlined in the WYLES Technical Planning Guidance¹⁹.

APPENDICES

APPENDIX A: GLOSSARY OF TERMS

Term	Definition
AADT	Annual Average Daily Traffic flow.
Air quality objective	Policy target generally expressed as a maximum ambient concentration to be achieved, either without exception or with a permitted number of exceedances within a specific timescale (see also air quality standard).
Air quality standard	The concentrations of pollutants in the atmosphere which can broadly be taken to achieve a certain level of environmental quality. The standards are based on the assessment of the effects of each pollutant on human health including the effects on sensitive sub groups (see also air quality objective).
Annual mean	The average (mean) of the concentrations measured for each pollutant for one year. Usually this is for a calendar year, but some species are reported for the period April to March, known as a pollution year. This period avoids splitting winter season between two years, which is useful for pollutants that have higher concentrations during the winter months.
AQAP	Air Quality Action Plan.
AQMA	Air Quality Management Area.
AQS	Air Quality Strategy.
Defra	Department for Environment, Food and Rural Affairs.
EPUK	Environmental Protection UK.
Exceedance	A period of time where the concentrations of a pollutant is greater than, or equal to, the appropriate air quality standard.
HDV	Heavy Duty Vehicles (HGVs + buses and coaches)
HGV	Heavy Goods Vehicles.
IAQM	Institute of Air Quality Management.
LAQM	Local Air Quality Management.
LDV	Light Duty Vehicles (motorbikes, cars, vans and small trucks)
NO	Nitrogen monoxide, a.k.a. nitric oxide.
NO ₂	Nitrogen dioxide.
NO _x	Nitrogen oxides.
Percentile	The percentage of results below a given value.
PM ₁₀	Particulate matter with an aerodynamic diameter of less than 10 micrometres.
PM _{2.5}	Particulate matter with an aerodynamic diameter of less than 2.5 micrometres.
micrograms per cubic metre (µg.m ⁻³)	A measure of concentration in terms of mass per unit volume. A concentration of 1 µg.m ⁻³ means that one cubic metre of air contains one microgram (millionth of a gram) of pollutant.

APPENDIX B: PROPOSED DEVELOPMENT MASTERPLAN



The use of drawings by the Customer acts as an agreement to the following statements. The Customer must not use the drawings if it does not agree with any of the following statements:

All drawings are based upon site information supplied by third parties and as such their accuracy cannot be guaranteed. All features are approximate and subject to clarification by a detailed topographical survey, statutory service enquiries and confirmation of the legal boundaries. Do not scale the drawings. Figured dimensions must be used in all cases. All dimensions must be checked on site. Any discrepancies must be reported in writing to Colour-UDL before proceeding. All drawings are copyright protected. Refer to full Terms & Conditions at www.colour-udl.com

- KEY**
- Site Boundary
- SOFTSCAPE**
- Existing Trees (RPZ dashed)
 - Existing Trees to be removed
 - Proposed Trees
 - Hedgerow Planting
 - Ornamental Shrub Planting
 - Native Shrub Planting
 - Wildflower Meadow Seeding
 - Wetland / Pond Margin Seeding
 - Woodland Undergrowth Seeding
 - Grazing Pasture Seeding
 - Amenity Grass Seeding
 - Reinforced Grass Turf
- HARDSCAPE**
- Retaining Wall (refer to Engineer's details)
 - 2.0m high Freestanding Wall (refer to Engineer's details)
 - Slab Paving
 - Blacktop Tarmac
 - Coloured Tarmac
 - Wet Pour Safety Surface
 - Timber Decking
 - MUGA Sports Surface
 - Permeable Paving
 - Reinforced Gravel
 - Seating
- FENCING**
- 3.0m Closeboard Vertical Featheredge Fencing
 - 3.0m Rebound Weld Mesh Fencing
 - 2.4m Anti-climb Weld Mesh Fencing
 - 1.8m Anti-climb Weld Mesh Fencing
 - 1.5m Anti-climb Weld Mesh Fencing
 - 1.5m Galvanised Wire Mesh Fencing to Goats Enclosure (75-150mm mesh size)
 - 1.5m Galvanised Wire Mesh Fencing to Chicken Run (25mm mesh size)
 - 1.1m Galvanised Wire Mesh Fencing to Pigs Enclosure (75-150mm mesh size) with electr. pasture tape to bottom
 - 1.1m Timber Picket Fencing to Veg. beds with 600mm high rabbit-proof wire netting
 - 1.1m Cleft Chestnut Fencing

31	Revised Substation location	21.09.23	TK	-
Rev	Amendments	Date	Drwn	Chkd

Project
Joseph Norton Academy, Deighton

Drawing Title
General Arrangement Plan
Landscape Layout

Project No. 2352	Scale @ A2 1:500	Project Status For Planning
Drawing No. L-2352-GAP-I000		Revision 31

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APPENDIX C: PLANNING POLICY AND LEGISLATION

National Legislation and Planning Policy

The UK Air Quality Strategy

European Union (EU) legislation forms the basis of air quality policy and legislation in the UK. The EU 2008 ambient Air Quality Directive¹ sets limits for ambient concentrations of air pollutants including nitrogen dioxide (NO₂) and particulate matter (PM₁₀ and PM_{2.5}). The air quality standards and objectives are prescribed through the Air Quality (England) Regulations 2000², as amended, for the purpose of the Local Air Quality Management Framework. The Air Quality (England) Regulations were amended in 2002⁵ and again in 2010⁶, with miscellaneous amendments added in 2020¹⁰ following the UK exit from the EU. Additionally, an updated PM_{2.5} objective was published in 2023⁹ with an interim target to be achieved by 2028¹⁹.

The UK Government are required under the Environment Act 1995³ to produce a national Air Quality Strategy (AQS). The AQS was first published in 1997⁷ and was most recently reviewed and updated in 2007⁸. The AQS provides an overview of the Government's ambient air quality policy and sets out the air quality standards and objectives to be achieved and measures to improve air quality.

The Environment Act 2021⁴ was granted Royal Assent in November 2021 and contains amendments to Part IV of the Environment Act 1995³ with regard to the Local Air Quality Management regime. Under the Environment Act 2021⁴, the Secretary of State must lay a statement before Parliament setting out progress made in meeting air quality objectives and standard in England and steps taken towards achieving the standards. The Environment Act 2021⁴ also places responsibility on local authorities to co-operate with air quality partners in the preparation of Air Quality Action Plans and identification of measures which should be monitored within the Plan and dates by which they should be implemented.

Part IV of the Environment Act³ requires local authorities in the UK to review local air quality within their administrative area and, if relevant air quality standards and objectives are likely to be exceeded, designate Air Quality Management Areas (AQMAs). Following the designation of an AQMA, local authorities are required to publish an Air Quality Action Plan (AQAP) detailing measures to be taken to improve local air quality and work towards meeting the relevant air quality standards and objectives.

National Planning Policy Framework

The National Planning Policy Framework (NPPF)¹² was amended in July 2021 and sets out the Government's planning policies for England and how these are expected to be applied.

The NPPF¹² recognises air quality within Section 15: Conserving and enhancing the natural environment, and states that:

"Planning policies and decisions should contribute to and enhance the natural and local environment by:

[...]

e) 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;

[...]

Ground conditions and pollution

[...]

Planning policies and decisions should also ensure that new development is appropriate for its location taking into account the likely effects (including cumulative effects) of pollution on health, living conditions and the natural environment, as well as the potential sensitivity of the site or the wider area to impacts that could arise from the development.

[...]

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."

With regard to assessing cumulative effects the NPPF¹² states:

"Planning policies and decisions should also ensure that new development is appropriate for its location taking into account the likely effects (including cumulative effects) of pollution on health, living conditions and the natural environment, as well as the potential sensitivity of the site or the wider area to impacts that could arise from the development.

[...]"

Planning Practice Guidance

The Planning Practice Guidance (PPG) for air quality¹³ was updated in November 2019 and provides guiding principles on how the planning process can take account of the impacts of new development on air quality.

The PPG¹³ sets out the following with regard to air quality and planning:

- "What air quality considerations does planning need to address;
- What is the role of plan-making with regard to air quality;

- *Air quality concerns relevant to neighbourhood planning;*
- *What information is available about air quality;*
- *When could air quality considerations be relevant to the development management process;*
- *What specific issues may need to be considered when assessing air quality impacts;*
- *How detailed does an air quality assessment need to be; and*
- *How can an impact on air quality be mitigated".*

The PPG¹³ sets out the pollutants for which there are legally binding limits for concentrations and those which the UK also has national emissions reduction commitments.

The PPG¹³ states that development plans may need to consider:

- *"what are the observed trends shown by recent air quality monitoring data and what would happen to these trends in light of proposed development and / or allocations;*
- *the impact of point sources of air pollution (pollution that originates from one place);*
- *the potential cumulative impact of a number of smaller developments on air quality as well as the effect of more substantial developments, including their implications for vehicle emissions;*
- *ways in which new development could be made appropriate in locations where air quality is or is likely to be a concern, and not give rise to unacceptable risks from pollution. This could, for example, entail identifying measures for offsetting the impact on air quality arising from new development including supporting measures in an air quality action plan or low emissions strategy where applicable; and*
- *opportunities to improve air quality or mitigate impacts, such as through traffic and travel management and green infrastructure provision and enhancement".*

The PPG¹³ also states what may be considered relevant to determining a planning application and these include whether a development would:

- *"Lead to changes (including any potential reductions) in vehicle-related emissions in the immediate vicinity of the proposed development or further afield. This could be through the provision of electric vehicle charging infrastructure; altering the level of traffic congestion; significantly changing traffic volumes, vehicle speeds or both; or significantly altering the traffic composition on local roads. Other matters to consider include whether the proposal involves the development of a bus station, coach or lorry park; could add to turnover in a large car park; or involve construction sites that would generate large Heavy Goods Vehicle flows over a period of a year or more;*
- *Introduce new point sources of air pollution. This could include furnaces which require prior notification to local authorities; biomass boilers or biomass-fuelled Combined Heat and Power plant; centralised boilers or*

plant burning other fuels within or close to an air quality management area or introduce relevant combustion within a Smoke Control Area; or extraction systems (including chimneys) which require approval or permits under pollution control legislation;

- *Expose people to harmful concentrations of air pollutants, including dust. This could be by building new homes, schools, workplaces or other development in places with poor air quality;*
- *Give rise to potentially unacceptable impacts (such as dust) during construction for nearby sensitive locations;*
- *Have a potential adverse effect on biodiversity, especially where it would affect sites designated for their biodiversity value".*

The PPG¹³ provides guidance regarding what should be included within an air quality assessment. Examples of potential air quality mitigation measures are also provided.

Local Planning Policy

Kirklees Council: Kirklees Local Plan (2019) Kirklees Local Plan Strategy and Policies

The Kirklees Local Plan¹⁴ Kirklees Local Plan Strategy and Policies is the statutory development plan for the Kirklees Council area. The Plan contains the vision and strategic objectives for the development of Kirklees up to 2031. The Plan contains clear specific policies to guide decisions on planning applications. The following policies are relevant with regard to air quality:

"Policy LP20 - Sustainable travel

The council will support demand management measures which discourage single occupancy car travel within new development and encourage the use of low emission vehicles to improve areas with low levels of air quality. Proposals should include measures to encourage the use of sustainable travel options, including public transport, the promotion of personal journey planning, walking, cycling, car sharing, electronic communication and home working.

[...]

Policy LP47 - Healthy, active and safe lifestyles

The council will, with its partners, create an environment which supports healthy, active and safe communities and reduces inequality.

Healthy, active and safe lifestyles will be enabled by:

[...]

ensuring that the current air quality in the district is monitored and maintained and, where required, appropriate mitigation measures included as part of new development proposals.

[...]

Policy LP51 - Protection and improvement of local air quality

Where the development introduces new receptors into Air Quality Management Areas or Areas of Concern or near other areas of relatively poor air quality, for example near roads or junctions, the development must incorporate sustainable mitigation measures that protect the new receptors from unacceptable levels of air pollution. Where sustainable mitigation measures cannot be introduced which prevent receptors from being exposed to unsafe levels of air pollution, development will not be permitted.

[...]"

The above policies were taken into consideration throughout the undertaking of the assessment.
