



EDWARDS WILSON LTD

53 BELSIZE SQUARE, CAMDEN, NW3 4HY

DUST MANAGEMENT PLAN

OCTOBER 2019

2339W-SEC-00001-03

FINAL REPORT



EDWARDS WILSON LTD 53 BELSIZE SQUARE, CAMDEN, NW3 4HY DUST MANAGEMENT PLAN

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| REVIEW AND AUTHORISATION | | | | | |
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| Authored By Kerrie Baggs | Position Environmental Consultant | Signature | Date 30/09/2019 | | |
| Reviewed By Alaric Lester | Position Associate | Signature | Date 2/10/2019 | | |
| Checked By Alaric Lester | Position Associate | Signature | Date 2/10/2019 | | |
| Approved By Patrick Williams | Position Director | Signature | Date 3/10/2019 | | |

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1. INTRODUCTION

1.1 Background

- 1.1.1 Southdowns Environmental Consultants Ltd (Southdowns) was commissioned by Edwards Wilson Ltd in September 2019 to produce a Dust Management Plan (DMP) for a proposed residential redevelopment located at No. 53 Belsize Square within the London Borough of Camden.
- 1.1.2 The purpose of the Dust Management Plan is to prescribe appropriate measures to manage dust effects from the site. This is done through assessing the potential risk of adverse dust effects and identifying appropriate best-practice measures, commensurate with the risk.

1.2 Report Structure

1.2.1 Details of the site and the proposed scheme are described in the following section of this report. The effects from the construction are assessed in Section 3, proposed monitoring is presented in Section 4 and the assessment is summarised in Section 5.



2. SITE DETAILS

2.1 Site Description

- 2.1.1 No. 53 Belsize Square, London, NW3 4HY is located within the administrative boundary of the London Borough of Camden (LBC).
- 2.1.2 The existing property comprises a two-storey vicarage, with an in-built garage. The west party wall adjoins St Peter's Church and Keren's Nursery lies 15m to the south-east. The immediate surrounding area is predominantly residential, with non-residential institutions nearby including Microbiome Diagnostics Pharmacy to the north and Belsize Square Synagogue and two nurseries to the south-east.
- 2.1.3 The development site is bounded by Belsize Square to the north and south. Finchley Road (A41) is approximately 430m southwest of the site. Belsize Park, Swiss Cottage and Finchley Road stations are all located within 600m of the site.

2.2 Proposed Development

- 2.2.1 The development proposal involves the demolition of the existing two-storey vicarage and the erection of two four-storey dwellings, one three-bedroom maisonette and one onebedroom flat.
- 2.2.2 The construction works are projected to commence in 2019.
- 2.2.3 A plan showing the location of the development site is presented in Figure A1.



3. DUST AND EMISSIONS RISK ASSESSMENT

3.1 Overview

- 3.1.1 The purpose of this assessment is to identify the level of risk of dust associated with the construction activities.
- 3.1.2 Dust from construction processes contain a range of particle sizes, types and compositions. These can cause annoyance from soiling, or even morbidity or mortality effects.
- 3.1.3 The assessment has been undertaken in accordance with the method outlined in the Mayor of London's Supplementary Planning Guidance, The Control of Dust and Emissions During Construction and Demolition [1]. The main steps are as follows:
 - screen the need for a detailed assessment;
 - assess the risk of dust impacts during the demolition, earthworks, construction and track out phases;
 - define the potential dust emission magnitude;
 - define the sensitivity of the areas; and
 - define the risk of impacts.

3.2 Screening

3.2.1 Assessment is required if there are human, soiling or ecological receptors within 50 m of the site or track out routes (up to 500m from site entrance).

3.3 Sensitive Receptors

- 3.3.1 Locations where people or wildlife may be adversely affected by changes in air quality or dust soiling are considered as sensitive receptors. Receptors introduced by the proposed development may also be relevant.
- 3.3.2 For dust soiling, high-sensitivity receptors may include both residential and ecological receptors, whilst medium- to low-sensitivity receptors may include amenity areas and workplaces.
- 3.3.3 There are numerous residential receptors in the vicinity which could be affected by changes in air quality arising from construction and demolition activities associated with the development. Commercial and assembly premises in the area will also be sensitive to dust.
- 3.3.4 Residential units located within 20m of site are No. 46 to No. 50 Belsize Square to the north and No. 2 to No. 7 Belsize Square to the south. St. Peter's Church located immediately adjacent to the west of the development site shares a party wall with St. Peters Vicarage. Keren's Nursery is located within 20m to the east of site.
- 3.3.5 No ecological receptor has been identified within 200 m of the development site.

3.4 Baseline Conditions

3.4.1 Predicted ambient pollutant concentrations are available from the Greater London Authority's London Atmospheric Emissions Inventory (LAEI) [2] at a 20 m² grid resolution across London for 2016 (baseline year).



3.4.2 Particulate concentrations in the immediate vicinity of the site meet the UK air quality objectives and are likely to decrease in future as the number of newer, cleaner vehicles increases. The predicted 2016 mean annual PM₁₀ concentration is 23.2 μgm⁻³ at the development site; the assumed ambient concentration of PM₁₀ for the purposes of this assessment was less than 24 μgm⁻³.

3.5 Site Evaluation

3.5.1 The level of dust risk attached to a construction site is dependent not only on the size and scale of a development, but also the activities, materials used, timing of works (seasonality) and sensitivity of the surrounding area. No significant emissions of NO_x are associated with the construction works for this proposed development.

3.6 Magnitude of Dust Emissions

Demolition

3.6.1 The existing two-storey semi-detached building to be demolished comprises brick and block external walls and timber stud internal walls. Materials will be demolished using a cruncher with dust suppressant. The total building volume is less than 20,000 m³ and demolition activities will take place less than 10m from the ground. Prior to demolition, enclosed solid hoarding will be erected around the site. A conveyor belt will be placed above the public footpath in a gantry. Spoil and waste will be stored on site near the boundary, before being loaded onto the conveyor and transferred from the site into a skip located in the two suspended parking bays on the south side of Belsize Square. The site is considered to have a 'Medium' dust emission magnitude for demolition.

Earthworks

3.6.2 The site covers less than 2,500 m² and the total material moved is anticipated to be much less than 20,000 tonnes. Earth is not expected to be removed from site. There will be a peak number of two heavy earth moving vehicles active at any one time. The underlying soil type is London Clay Formation (clay, silt and sand) [3] with a high potential for dust release. The site is considered to have a 'Small' dust emission magnitude for earthworks.

Construction

3.6.3 The total building volume to be constructed is estimated to be 2,694 m³. For the formation of the new basement slabs, concrete will be delivered to site ready-mixed and pumped onto site using a ground-line hydraulic pump. Reinforced concrete foundations, ground floor slabs and ground beams will be installed, with steel frameworks used where required. The floors and roofs will be made up of timber and the cavity walls will be made up of brick blocks. The site is considered to have a "Medium" dust emission magnitude for construction.

Trackout

3.6.4 The number of peak heavy-duty vehicles (HDVs) outward is predicted to be less than 10 per day. There will be no unpaved sections of the haul route. HDVs will access the site from the west, from Belsize Park, turning right onto Belsize Square. HDVs will exit the site by proceeding along Belsize Square in an anti-clockwise direction, returning back onto Belsize



Park before continuing onto Buckland Crescent. Overall, the site is considered to have a 'Small' dust emission magnitude for trackout.

3.6.5 The dust emission magnitudes for all activities are summarised in Table 3.1.

| Activity | Dust Emission Magnitude |
|--------------|-------------------------|
| Demolition | Medium |
| Earthworks | Small |
| Construction | Medium |
| Trackout | Small |

TABLE 3.1: DUST EMISSION MAGNITUDE

3.7 Sensitivity of the Area

- 3.7.1 There are more than 100 receptors with a high sensitivity to dust soiling and health effects within 20 m of the site boundary. Nearby receptors are predominantly residential properties, which have a high sensitivity to dust soiling and health effects.
- 3.7.2 The sensitivity of the area to dust soiling for demolition, earthworks, construction and trackout is assessed as 'High' and the sensitivity of the area to human health impacts from on-site and trackout activities is assessed as 'Medium', due to the number and proximity of sensitive receptors and a background annual mean PM₁₀ concentration of less than 24 μgm⁻³ in the vicinity of the site.
- 3.7.3 The sensitivity of the area is summarised in Table 3.2.

| Sensitivity of the Area | Demolition | Earthworks | Construction | Trackout |
|-------------------------|----------------|------------|--------------|----------|
| Dust Soiling | High High High | | High | High |
| Human Health | Medium | Medium | Medium | Medium |

TABLE 3.2: SENSITIVITY OF THE AREA ASSESSMENT

3.8 Dust Risk

The likely risk of dust effects, based on the contents of Table 3.1 and 3.2, at nearby sensitive receptors without mitigation in place is summarised in Table 3.3. There is a medium risk from demolition, earthworks, construction and trackout activities causing dust soiling effects at local receptors. There is a medium risk of health effects from demolition and construction activities and a low risk from earthworks and trackout activities.

| Summary | Demolition | Earthworks | Construction | Trackout | |
|-----------------------------|------------------------------|-------------|--------------|-------------|--|
| Dust Soiling Medium Risk Me | | Medium Risk | Medium Risk | Medium Risk | |
| Human Health | Human Health Medium Risk Low | | Medium Risk | Low Risk | |

TABLE 3.3: SUMMARY DUST RISK CATEGORY



3.9 Mitigation

- 3.9.1 Under best-practice guidance, the proposed development constitutes a medium risk for demolition and construction dust during construction activities.
- 3.9.2 Impacts associated with the proposed development are likely to be in the form of dust generated primarily during demolition- and construction-phase activities. The use of appropriate mitigation measures throughout the demolition and construction periods will ensure that impacts to sensitive receptors are minimised or removed.
- 3.9.3 Based on the results of the dust risk assessment, it is recommended that the following general best-practice measures be adopted and included in this dust management plan. The GLA SPG, The Control of Dust and Emissions During Construction and Demolition [1], and Camden Council's 'Camden Planning Guidance' (CPG) document on air quality [4] have been considered in drawing up these measures.

| Management Category | Mitigation Measure | | |
|------------------------|---|--|--|
| | Develop and implement a stakeholder communications plan that includes community engagement before work commences on site. | | |
| | Develop a Dust Management Plan. | | |
| | Display the name and contact details of person(s) accountable for air quality pollutant emissions and dust issues on the site boundary. | | |
| | Display the head or regional office contact information. | | |
| | Record and respond to all dust and air quality pollutant emissions complaints. | | |
| Site Management | Make a complaint log available to the local authority when asked. | | |
| | Carry out regular site inspections to monitor compliance with air quality and dust control procedures, record inspection results, and make an inspection log available to the local authority when asked. | | |
| | Increase the frequency of site inspections by those accountable for dust and air quality pollutant emissions issues when activities with a high potential to produce dust and emissions and dust are being carried out, and during prolonged dry or windy conditions. | | |
| | Record any exceptional incidents that cause dust and air quality pollutant emissions, either on or off the site, and the action taken to resolve the situation is recorded in the log book. | | |
| | Plan site layout: machinery and dust causing activities should be located away from receptors. | | |
| Preparing and | Erect solid screens or barriers around dust activities or the site boundary that are at least as high as any stockpiles on site. | | |
| maintaining the site | Fully enclose site or specific operations where there is a high potential for dust production and the site is active for an extensive period. | | |
| | Avoid site runoff of water or mud. | | |
| | Keep site fencing, barriers and scaffolding clean using wet methods | | |

TABLE 3.4: RECOMMENDED MITIGATION



| Management Category | Mitigation Measure |
|-------------------------------|--|
| | Remove materials from site as soon as possible. |
| | Cover, seed or fence stockpiles to prevent wind whipping. |
| Preparing and maintaining the | Carry out regular dust soiling checks of buildings within 100m of site boundary and cleaning to be provided if necessary. |
| site | Agree monitoring locations with the Local Authority. |
| | Baseline monitoring period to be agreed with Camden Council. |
| | Put in place real-time dust and air quality pollutant monitors across the site and ensure they are checked regularly. |
| | Ensure all on-road vehicles comply with the requirements of the London Low Emission Zone. |
| | Ensure all non-road mobile machinery (NRMM) comply with the standards set within the GLA SPG on dust and emissions. |
| Operating vehicle/machinery | Ensure all vehicles switch off engines when stationary – no idling vehicles. |
| and sustainable travel | Avoid the use of diesel- or petrol-powered generators and use mains electricity or battery powered equipment where possible. |
| | Produce a Construction Logistics Plan to manage the sustainable delivery of goods and materials. |
| | Implement a Travel Plan that supports and encourages sustainable travel (public transport, cycling, walking, and car-sharing). |
| | 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. |
| | Ensure an adequate water supply on the site for effective dust/particulate matter mitigation (using recycled water where possible). |
| Operations | Use enclosed chutes, 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 any dry spillages, and clean up spillages as soon as reasonably practicable after the event using wet cleaning methods. |
| Waste | Reuse and recycle waste to reduce dust from waste materials |
| Management | Avoid bonfires and burning of waste materials. |

TABLE 3.4: (CTD) RECOMMENDED MITIGATION



| Management Category | Mitigation Measure |
|---------------------------------|---|
| | Soft strip inside buildings before demolition (retaining walls and windows in the rest of the building where possible, to provide a screen against dust). |
| Measures Specific | Ensure water suppression is used during demolition operations. |
| to Demolition | Avoid explosive blasting, using appropriate manual or mechanical alternatives. |
| | Bag and remove any biological debris or damp down such material before demolition. |
| | Re-vegetate earthworks and exposed areas/soil stockpiles to stabilise surfaces. |
| Measures Specific to Earthworks | Use Hessian, mulches or trackifiers where it is not possible to re-vegetate or cover with topsoil. |
| | Only remove secure covers in small areas during work and not all at once. |
| | Avoid scabbling (roughening of concrete surfaces) if possible. |
| Measures Specific | 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. |
| to Construction | 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. |
| | Regularly use a water-assisted dust sweeper on the access and local roads, as necessary, to remove any material tracked out of the site. |
| | Avoid dry sweeping of large areas. |
| | Ensure vehicles entering and leaving sites are securely covered to prevent escape of materials during transport. |
| | Record all inspections of haul routes and any subsequent action in a site log book. |
| Measures Specific | Install hard surfaced haul routes, which are regularly damped down with fixed or mobile sprinkler systems and regularly cleaned. |
| to Trackout | Inspect haul routes for integrity and instigate necessary repairs to the surface as soon as reasonably practicable; |
| | Implement a wheel washing system (with rumble grids to dislodge accumulated dust and mud prior to leaving the site where reasonably practicable). |
| | Ensure there is an adequate area of hard surfaced road between the wheel wash facility and the site exit, wherever site size and layout permits. |
| | Access gates to be located at least 10m from receptors where possible. |
| | Apply dust suppressants to locations where a large volume of vehicles enter and exit the construction site. |

TABLE 3.4: (CTD) RECOMMENDED MITIGATION



3.9.4 The above measures are not intended to be a complete list of all best practice guidance; for full mitigation measures and control, the GLA Supplementary Planning Guidance for construction and demolition sites should be consulted. Provided these measures are adhered to, emissions from the site during construction should not present a significant problem at local receptor locations.

3.10 Roles and Responsibilities

- 3.10.1 It is recommended that appropriate resources be supplied to cover the requirements of the DMP and to ensure that the requirements are communicated effectively and acted upon in an appropriate manner. Recommended key roles and responsibilities relating to air quality are detailed in Table 3.5.
- 3.10.2 The Site Manager should be confirmed prior to start of main site works.

| Role | Responsibilities |
|--------------------|---|
| Site Manager | Ensure that the mitigation and monitoring requirements laid out in the DMP are carried out during works on site. |
| | Ensure that staff are aware of the requirements of the dust risk assessment and management plan and have access to the document. Regular training of staff should be implemented. |
| | Undertake and record dust inspections of the site as required by the dust risk assessment and management plan. |
| | Ensure that site documentation (including method statements and risk assessments) includes dust mitigation. |
| | Act on complaints and dust alerts as detailed in the dust risk assessment and management plan. |
| | Maintain up-to-date site log of air quality events and complaints. |
| | Investigate the cause of air quality events and apply additional mitigation are required. |
| | Act as the key point of contact for queries and complaints regarding air quality emissions from site. |
| All Site Personnel | Carry out the works in line with the dust risk assessment and management plan requirements. |
| | Report observations of dust events or deviations from the dust risk assessment and management plan procedures. |
| | Attend environmental management training. |

TABLE 3.5: ROLES AND RESPONSIBILITIES



4. PROPOSED DUST MONITORING

4.1 Monitoring

- 4.1.1 This section details the approach to be taken by the site operators to ensure that air quality and dust emissions are monitored and that any problems or complaints are dealt with in a satisfactory manner. It is recommended that monitoring commensurate to the level of risk is adopted.
- 4.1.2 Visual monitoring of dust is recommended throughout the works and supplemented by dust deposition and/or soiling monitoring during the construction phase.

4.2 Monitoring: Visual Inspections

- 4.2.1 Daily visual inspections, both on- and off-site and 50 m along haul routes onto the public highway, will be undertaken to ensure that the measures are effective at minimising off-site dust soiling. Surfaces which may display signs of dust soiling are buildings, cars, window sills, lamp posts and other street furniture. All inspection results will be recorded in the site log.
- 4.2.2 These inspections will take into account the level of dust soiling.
- 4.2.3 If significant visible dust soiling is observed along the haul route, the frequency of cleaning mitigation measures (such as wet brushing and road sweeping) will be increased to daily. If settled dust or dust plumes from the site are observed off-site, a check of site activities will be undertaken to determine the likely source, and whether dust emissions are still being produced on site. If this is found to be the case, dusty activities will be halted until corrective actions are be taken to prevent or minimise dust emissions. All observations will be recorded in the site log book. Any photographic records taken will be kept, recorded and maintained alongside monitoring records.
- 4.2.4 If dust soiling is observed on a regular basis (three consecutive days), the cause of the soiling will be investigated. If the soiling is determined to be coming from the site, then mitigation measures within the AQC will be reassessed and updated accordingly to prevent further exceedances.
- 4.2.5 The results of these inspections will be recorded in the site log and sent to Camden Council (CC) on request.
- 4.2.6 If a dust incident is noticed by site personnel during the soiling inspections of surrounding areas undertaken as part of the dust management plan and it is determined that the incident is attributable to the worksite and requires further controls (within industry best practice limits) these will be implemented by the contractor and a report will be produced for inclusion in the log. A copy of the complaint log will be made available to CC on request.



4.3 Monitoring: Real-time Particulate Monitoring

- 4.3.1 There is a medium dust risk of health effects and a medium risk of dust soiling, hence the requirement for two real-time particulate monitoring stations, as indicated in the Air Quality CPG [4]. The proposed locations are shown in Figure A2 of Appendix A. They are at opposite ends of the site, on the north-eastern site boundary and the south-western site boundary respectively, taking into account the prevailing wind direction, the likely location of dust-generating activities and a need for monitoring locations to be unobstructed. There are no major off-site emission sources nearby. The wind direction from Heathrow Airport over 2018 is shown in Figure A3. This shows a predominance of south-westerly winds, with north-easterly and westerly winds also occurring for a substantial proportion of time. The chosen south-west to north-east transect is ideal for identifying site contributions to dust during south-westerly and north-easterly wind conditions.
- 4.3.2 The proposed locations have been identified as being in clear, unobstructed positions. There are numerous overhanging trees around the site. Sampler inlets will be located away from overhanging trees as far as reasonably practicable.
- 4.3.3 The Air Quality CPD [4] indicates that baseline monitoring would normally be required for at least 6 months prior to commencement. However, there is currently little dust-generating activity in the vicinity and baseline PM₁₀ and PM_{2.5} levels are not expected to be elevated. Due to the time constraints of the programme, it is proposed that baseline monitoring commences as soon as practicably possible and continues until the bulk demolition works commence, which is due in December. In addition, seasonal changes in PM₁₀ levels will also be considered in the interpretation of baseline monitoring results.
- 4.3.4 The monitoring locations will be reviewed throughout the project in response to periods of intense construction work or following receipt of concerns raised by nearby sensitive receptors.

QA/QC

- 4.3.5 Osiris airborne particulate monitoring units are proposed. These monitors automatically measure particulates in real-time and can simultaneously monitor the concentrations of total suspended particles (TSP), PM_{10} and $PM_{2.5}$.
- 4.3.6 Maintenance will be undertaken as per the manufacturer's guidelines, with the filters changed and flow rate calibrated at maximum intervals of 3 months, and annual laboratory calibration against a reference instrument in accordance with the requirements of the Osiris MCERTS certification every 12 months.
- 4.3.7 A real-time web-based system will automatically download the data from the units, and monitoring data will be remotely accessible to enable on-demand interrogation. The Osiris units will be checked daily on this system to ensure that the power supply is functioning and the units are performing correctly. This will be carried out on site by the Site Manager or remotely by an Air Quality Specialist.



<u>Alerts</u>

- 4.3.8 A PM₁₀ Site Action Level (SAL) of 192 μg/m³ (15-minute mean, adjusted from the guideline values to take into account the fact that Osiris units do not measure the volatile fraction of PM₁₀) will be implemented, as recommended in the IAQM monitoring guidance document [5]. An early warning alert of 144 μg/m³ (15-minute mean, 75% of the SAL) will be put in place to allow the Site Manager to initiate a check on site activities and to help the site management team in preventing a full exceedance of the SAL.
- 4.3.9 Instant email alerts will be sent to the Site Manager and relevant site personnel when the early-warning alert or SAL are exceeded. System checks will be completed on the first working day of the week to ensure the monitors are functioning correctly and logging data. Where any equipment fault is detected, corrective actions will be identified and implemented, and data verification conducted where appropriate.
- 4.3.10 The Site Manager will be responsible for investigating and logging action taken in the event of PM₁₀ concentrations exceeding the site thresholds. If the SAL is exceeded during two consecutive 15-minute intervals, the following steps will be undertaken:
 - the Site Manager will, as quickly as practicable, investigate activities on the site to ascertain
 whether any visible dust is emanating from the site and identify activities occurring without
 adequate dust control measures implemented. Site records for past activities will be
 reviewed where necessary. Weather conditions as well as wind direction and strength will
 also be noted:
 - any identified causes will be rectified, where practicable. Actions will be recorded in the site logbook, which will be made available to CC on request;
 - if no source of the dust event is identified, other project sites and local authority monitoring sites will be contacted to investigate whether there is an increase in particulate concentrations in the wider area:
 - if the cause of the alert is not related to site operations, the outcome of any investigation will be recorded in the site logbook, which will be made available to CC on request; and
 - if necessary, following exceedances of the SAL, toolbox talks will be delivered to the site team to inform of causes of dust emissions, receptor locations and/or control measures that can be employed.

4.4 Reporting

- 4.4.1 Monitoring data from the Osiris units will be downloaded automatically onto the web-based system and reported on a monthly basis (within ten working days of month-end) following verification by the contractor's Air Quality Specialist. Monthly monitoring reports will be issued to Camden's air quality team at AirQuality@camden.gov.uk.
- 4.4.2 The monthly reports will include mean concentrations, alert level exceedances and data capture rates for each month, and will provide explanations for any exceedances and data loss.



4.5 Complaints Procedure

- 4.5.1 The Site Manager will immediately investigate all dust complaints that are attributed to the worksite. All complaints received will be recorded in the complaint log, investigated and corrective actions implemented and feedback given to the complainant. If it is determined that the complaint is valid or the incident is attributed to the worksite, then further controls (within industry best practice limits) will be implemented and a report will be produced for inclusion in the log.
- 4.5.2 Site staff will maintain a log of any complaints received, subsequent actions taken to investigate the complaint and any actions which have been put in place to rectify the situation (if found to be necessary). The incident and complaint reporting template in Appendix B, will be used to record complaints and exceedances of the SAL and actions taken.



5. SUMMARY & CONCLUSIONS

- 5.1.1 A dust management plan has been prepared on behalf of Edwards Wilson Ltd to assess the dust risks associated with demolition and construction activities at No. 53 Belsize Square.
- 5.1.2 The outcome of the dust risk assessment presented in Section 3.8 shows that there is no risk to ecological receptors and the risk of health effects and dust soiling is medium.
- 5.1.3 With the control measures described in this dust management plan, the potential for significant dust related adverse effects will be minimised.



6. REFERENCES

- 1. Mayor of London. 2014. The Control of Dust and Emissions during Construction and Demolition Supplementary Planning Guidance.
- Greater London Authority (GLA). 2017.London Atmospheric Emissions Inventory (LAEI):
 Concentrations. https://data.london.gov.uk/dataset/london-atmospheric-emissions-inventory-2016. Accessed September 2019.
- 3. British Geological Survey. 2017. Geology of Britain Viewer. Natural Environment Research Council. http://mapapps.bgs.ac.uk/geologyofbritain/home.html? Accessed September 2019.
- 4. Camden Council. March 2019. Camden Planning Guidance Air Quality.
- 5. Institute of Air Quality Management. October 2018. Guidance on Monitoring in the Vicinity of Demolition and Construction Sites (version 1.1).





FIGURE A1: SITE LOCATION AND SENSITIVE DUST RECEPTORS FOR NO. 53 BELSIZE SQUARE, CAMDEN

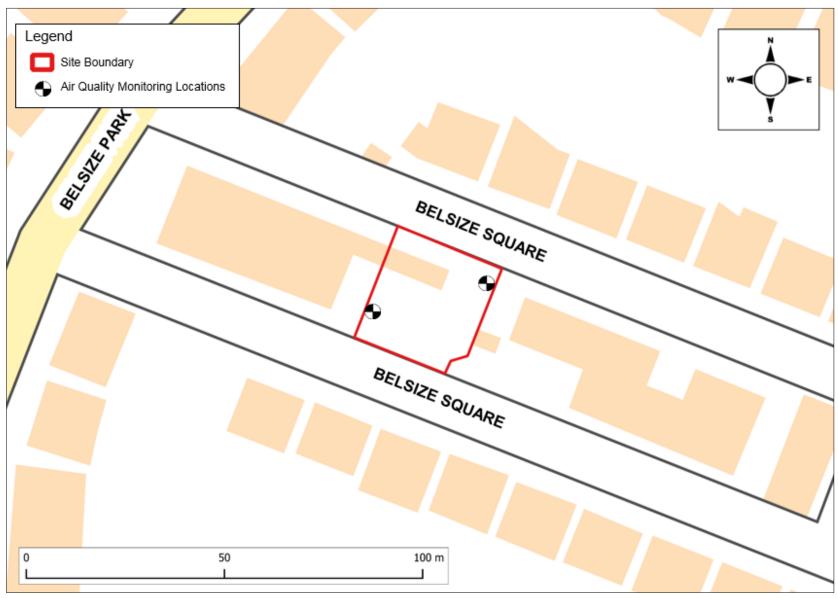


FIGURE A2: PROPOSED MONITORING LOCATIONS

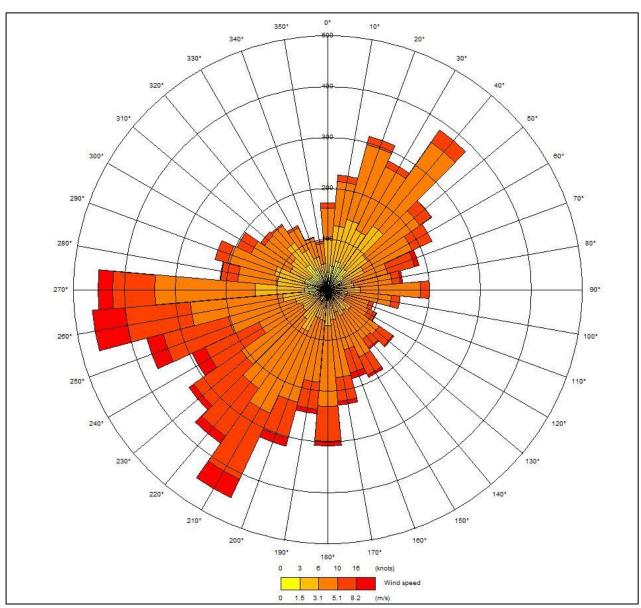


FIGURE A3: HEATHROW METEOROLOGICAL WIND DATA 2018

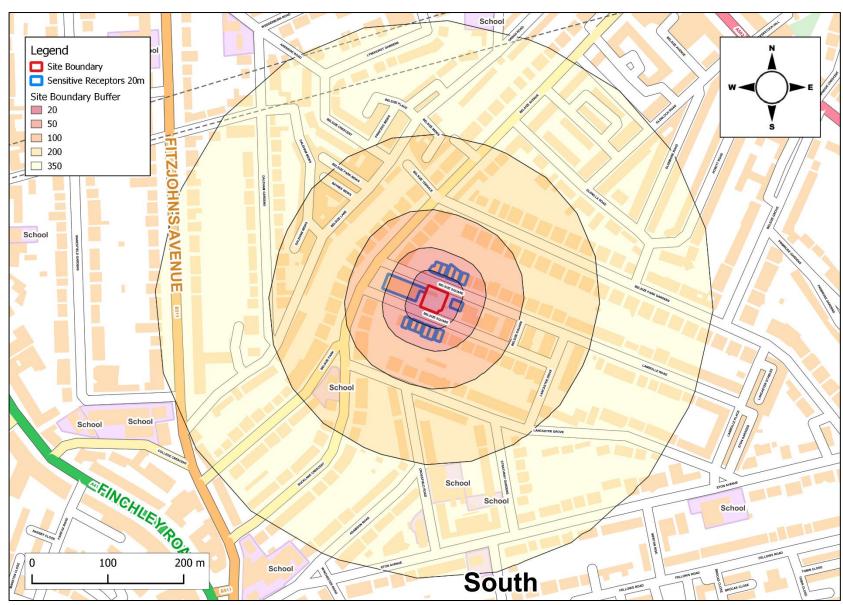


FIGURE A4: DUST RISK BUFFER AND SENSITIVE RECEPTORS

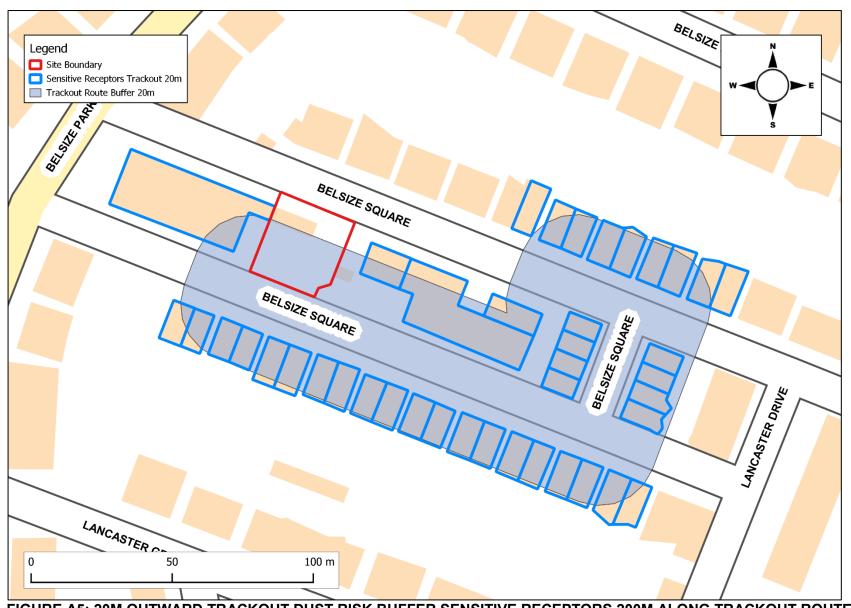


FIGURE A5: 20M OUTWARD TRACKOUT DUST RISK BUFFER SENSITIVE RECEPTORS 200M ALONG TRACKOUT ROUTE

| APPENDIX E | 3: INCIDENT AN | ID COMPLAIN | T REPORTING | S TEMPLATE | |
|------------|----------------|-------------|-------------|------------|--|
| | | | | | |
| | | | | | |

| Site Exceedance, Dust Incident and Complaint Form | | | | | | | |
|---|----------------------|-------|-----------|-------------------|--------|-----|-------------------|
| Reference: | | Date: | | - | Time: | | |
| Incident Type (sele | ect as appropriate): | | DUST EVEN | T / CON | MPLAIN | NT. | |
| DUST | | | | | | | |
| Location: | | | | | | | |
| PM ₁₀ Alert Threshold: µgm ⁻³ _{15 minute} | | | 250 | µgm ⁻³ | | | |
| Exceedance Level: µgm ⁻³ 15 minute | | | | | | | µgm ⁻³ |
| Visible Sign of Dust? | | | YE | S/NO | | | |
| DESCRIPTION OF IN | CIDENT/COMPLAINT: | | | | | | |
| | | | | | | | |
| ACTION TAKEN: | | | | | | | |
| | | | | | | | |
| Report Filed By: | | | | Date: | | | |