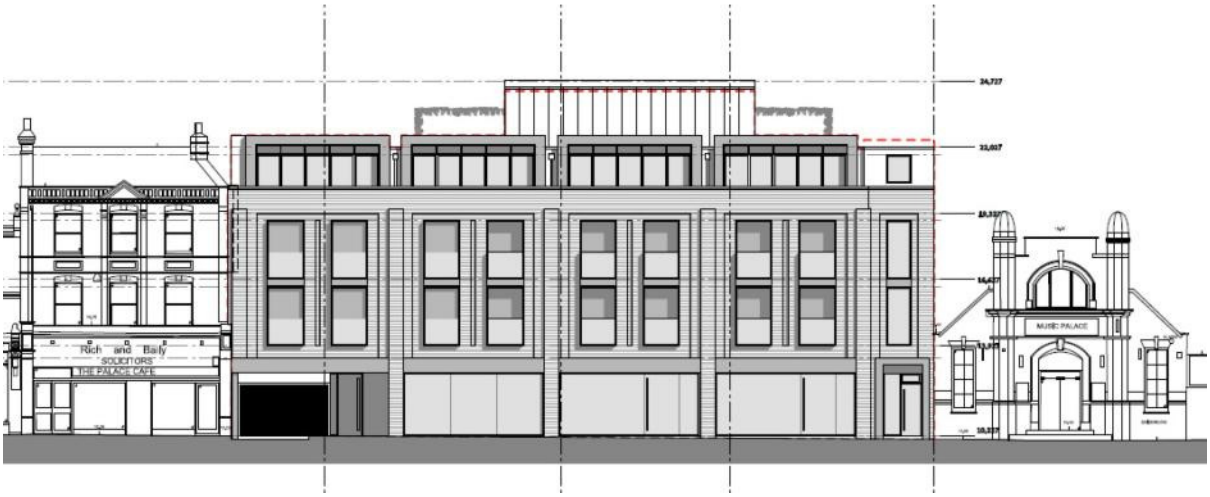


Management of Demolition & Construction Dust

For the approved development at 159 Tottenham Lane, London N8
(HGY/2014/0484)

Includes contractor's Considerate Constructors certificate of membership

February 2015 v1.0

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PLANNING

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1. Introduction

Planning permission was granted by Haringey Council on 31 October 2014 at 159 Tottenham Lane, London N8 for the "erection of a part 4 / part 5 storey building to contain retail development on the ground floor consisting of 422 m² of A1 use and 218 m² of A3 use with 18 residential units on the upper floors". The planning application reference number is HGY/2014/0484.

The purpose of this document is to illustrate how the selected contractor will manage the potential impact of dust during the building process. The document should be read in conjunction with the Method of Construction Statement and Land Remediation Strategy.

This document has been produced with reference to '*The control of dust and emissions during construction and demolition – Supplementary Planning Guidance'* (Greater London Authority, July 2014) and '*Guidance on the assessment of dust from demolition and construction*' (Institute of Air Quality Management, 2014). Other legislation and guidance is referred to throughout the document.

2. Risk assessment

Works program

Works are due to commence at the end of April 2015 (but no earlier than the day on which the pre-commencement planning conditions have been discharged). Enabling and foundation works (pre-superstructure) will last 1-2 months whilst the main superstructure and contract works (until completion) will continue for an additional 12-16 months.

Site context and location

The application site is currently (at the time of writing) in use as a hand car wash facility. The site consists only of hardstanding with no permanent structures situated above ground and **therefore there will be no demolition works involved at any phase during the development**.



Image 1: Photograph of site taken late November 2014

The site is bounded to the east and south by the rear gardens of residential properties which are well screened by a large brick wall supplemented by trees and bushes in the rear gardens. Commercial properties are situated to the west and north east. The site fronts the public pavement of Tottenham Lane and benefits from two existing crossovers. A petrol station with shop is situated on the other side of the road directly opposite the site. It is nevertheless considered that the surrounding area is mainly residential in nature despite the presence of nearby commercial premises.



Image 2: Satellite image showing application site (in red) and nearby properties

Dust emission magnitude

In accordance with Step 2A from the *Institute of Air Quality Management*'s assessment criteria (July 2014), the dust emission magnitude has been identified for each of the following stages: earthworks, construction and trackout. No demolition works are being proposed.

The *earthworks* stage covers a total site area of approx. 1,460 m² (significantly below the benchmark of 2,500 m² for a 'medium' site). No more than one heavy earth moving vehicle is anticipated at any one time (benchmark for 'medium' sites is more than 5 at any one time). Bunds are not expected to exceed 1-2 metres in height ('medium' benchmark: 4 metres) and the total amount of material moved is to be significantly below the 20,000 tonnes benchmark. Some concrete and tarmac will need to be broken up when the below-ground tanks are excavated however our land contamination specialists do not consider this localised procedure to have any significant impact on dust. The dust emission magnitude during earthworks for the application site is therefore considered 'small'.

The *construction* stage will involve the erection of a building with a total volume of approx. 8,050 m³ (significantly below the benchmark of 25,000 m³ for 'medium' sites). There will be no on-site concrete batching or sandblasting. There will furthermore be no impact piling. The dust emission magnitude during construction for the application site is therefore considered 'small'.

Finally, the *trackout* stage will involve no more than one or two HDV (>3.5t) movements per day (significantly below the benchmark of 10 for 'medium' sites). The site benefits from a hardstanding surface throughout (tarmac) and two existing crossovers. The dust emission magnitude during trackout for the application site is therefore considered 'small'.

Activity	Dust Emission Magnitude
Demolition	*Not applicable*
Earthworks	Small
Construction	Small
Trackout	Small

Table 1: Dust emission magnitude for the application site

Sensitivity of the surrounding area

In accordance with Step 2B from the *Institute of Air Quality Management*'s assessment criteria (July 2014), the sensitivity of the area to different impacts (dust soling, human health and ecological) has been identified for each of the following stages: earthworks, construction and trackout. No demolition works are being proposed.

The sensitivity of the area to *dust soiling* has been classified as 'high' (for all work phases) given that more than 10 high sensitivity receptors are located within 20 metres of the site boundary (mainly residential gardens, although these are well screened by the existing boundary wall). It should be noted that the removal of the car wash facility in itself is considered to have a positive effect on dust soiling in the long term.

The sensitivity of the area to *human health impacts* has been classified as 'low' throughout all work phases. Recent national background maps indicate an annual mean PM10

concentration of 22.64307 µg/m³ in the area (see appendix) and the number of receptors within 20 metres of the site is considered to be significantly below 100 (benchmark for 'medium' sensitivity).

There are no ecological receptors (as defined by the assessment criteria) within 50 metres of the application site. The sensitivity of the area to *ecological impacts* has therefore been classified as 'low' for all work phases.

Potential Impact	Sensitivity of the Surrounding Area			
	Demolition	**Earthworks**	**Construction**	**Trackout**
Dust soiling	n/a	High	High	High
Human Health	n/a	Low	Low	Low
Ecological	n/a	Low	Low	Low

Table 2: Sensitivity of the area to potential impacts

Risk of impacts

The following table has been generated in accordance with Step 2C from the *Institute of Air Quality Management*'s assessment criteria.

Potential Impact	Risk			
	Demolition	**Earthworks**	**Construction**	**Trackout**
Dust soiling	n/a	Low risk	Low risk	Low risk
Human Health	n/a	Negligible	Negligible	Negligible
Ecological	n/a	Negligible	Negligible	Negligible

3. Mitigation measures

The following site-specific mitigation measures have been drawn up using recommendations from the Institute of Air Quality Management. Measures from the London Plan SPG have also been included were they defer from – or are presented in addition to – the former.

All measures required for low risk sites (other than demolition) have been incorporated. Some other measures, including those deemed desirable/discretionary for low risk sites by the above guidance, have also been incorporated as good practice, as have measures taken from other sources.

All on-site personnel will be briefed on construction dust and provided with suitable respiratory protective equipment (RPE) where necessary as per Health and Safety Executive guidelines and other legislation.

Site management, communication and monitoring

The name and contact details of the person responsible for dust control will be displayed on the site boundary hoarding fronting the public highway. This person will be a competent member of the main contractor firm. Also attached to the hoarding will be the Considerate Constructors Scheme poster, which will include further contact details for local residents and businesses.

All complaints in relation to dust and air quality will be recorded in a dedicated logbook kept on-site. Each log entry will record the date the complaint was made, contact details of the person(s) who made the complaint, the likely cause(s) identified and the measures taken to rectify the issue at hand (including date when taken). Exceptional incidents, including those witnessed by on-site workers, will be recorded in any case.

Daily on-site and off-site monitoring of dust soiling levels will be made by visual assessment (especially near the site entrance and along the street frontage). Cleaning is to be provided where necessary.

The developer will arrange regular site inspections to ensure compliance with the measures identified in this document. Inspection results will be recorded in an inspection log book kept on-site. Such inspections will be increased during construction phases or operations with a higher potential to produce dust or during windy weather conditions.

Site preparation, layout and maintenance

Most of the site is already enclosed by high boundary or flank elevation walls, providing a physical barrier against dust. These are to be complemented by 2.4 metres of painted plywood hoarding along the rest of the boundary line, including to the front of the site facing the public highway. Dust screens are to be attached to the scaffolding where practical. Dust screens, existing boundary walls and hoarding will be cleaned at regular intervals using wet methods.

All machinery and dust causing activities will be located to the middle of the site or as far away from the boundary line as possible. Dust causing activities shall not take place on upper levels of unfinished buildings unless absolutely necessary or where suitable physical barriers are in place.

Wheel washing facilities and bunds will be located near the vehicular entrance to the site to minimize the runoff of water and mud. All site personnel are to enter and leave the site wearing clean clothes and shoe wear.

Materials with potential to emit dust will be covered and securely fastened at all times and only allowed on site shortly before they are actually required for the building works i.e. the principle of “just in time” deliveries.

Operation of vehicles and machinery

All vehicles servicing or entering the site are expected to comply with the requirements of the London Low Emission Zone. The on-site manager will ensure that all vehicles switch off their engines when stationary or not in use, with the same principle applying to machinery. All non-road mobile machinery (NRMM) is to comply with the standards set within the London Plan SPG.

Site personnel and visitors will be encouraged to use public transport where possible. Parking of vehicles will be discouraged in order to reduce the number of vehicles entering and leaving the site.

The use of diesel or petrol powered generators is to be avoided in favour of equipment powered by mains electricity or batteries. The contractor will encourage the correct use of all plant and machinery as well as regular maintenance of their exhaust systems, which are to be positioned as far away from adjoining buildings as possible.

Operations

Although the use of pre-fabricated materials or modules will be encouraged, where this is not possible any cutting, grinding and sawing will be conducted at ground level away from adjoining properties and by damping down with the use of water sprays. For this purpose an adequate water supply will always be available on site, including where possible recycled or non-potable water. The use of electric planes and cutters with dust filter will be encouraged.

Skips will be covered when not in use whilst chutes will be completely covered and their drop height kept to a minimum.

Wet cleaning equipment will be kept on site at all times in the event of spillages.

Waste management

The burning of waste or unwanted materials on site is to be strictly forbidden. Waste skips will be covered when not being used. Dust emissions can be reduced by minimizing the amount of waste produced. Waste will be managed under the principle of hierarchical waste management priorities which, in order of importance, are as follows: Reduce, Reuse, Recycle and Dispose.

Measures specific to demolition phase [not applicable]

No demolition works are proposed on site.

Measures specific to earthworks phase

Excavated material is to be covered by plastic sheeting and (if necessary) secured by sandbags before being disposed of. Hydrocarbon impacted materials excavated during the operations are to be stockpiled separately and covered appropriately as per land remediation strategy. Stockpiles will be removed by appropriately licensed waste collection contractors as soon as possible to avoid unnecessary on-site accumulation. Excavated areas are to be temporarily covered or re-surfaced as soon as possible.

Land contamination specialists will supervise the localized removal of tanks as per land remediation strategy. The use of suitable RPE by on-site personnel will be strictly monitored and enforced during this phase.

Measures specific to construction phase

Scrabbling is to be avoided where possible. Where necessary, scrabbling will only be allowed after pre-washing work surfaces and within a suitability screened-off area. Any residue resulting from scrabbling will be cleaned immediately.

Sand and other aggregates will not be allowed to dry out (unless required for a particular operation) and covered appropriately.

Measures specific to trackout phase

On-site vehicular movements will be confined to paved areas where possible. Due to the small footprint of the site internal haul routes will be of very short distances and vehicles are unlikely to be able to exceed 10 mph though this speed limit will be imposed nevertheless.

Wheel and chassis washing facilities will be available near the site entrance. Delivery vehicles carrying dusty materials will be securely sheeted.

The site entrance, including the abutting public highway, will be kept clean at all times through the use of water-assisted dust sweeping. There will be no dry sweeping of large areas.

4. Summary

This document has been produced with reference to '*The control of dust and emissions during construction and demolition – Supplementary Planning Guidance'* (Greater London Authority, July 2014) and '*Guidance on the assessment of dust from demolition and construction*' (IAQM, 2014).

There will be no demolition works as there are currently no permanent structures on site.

The potential impact of dust soiling during the earthworks, construction and trackout phases has been classified as low risk. Nevertheless, a series of dust control and mitigation measures have been identified in line with those recommended in the London Plan SPG, the IAQM guidance and other applicable legislation.

The chosen contractor will also comply with the requirements of the Considerate Contractors Scheme (CCS). A copy of the CCS certificate is available in the appendix of this document.

5. Appendix A: contractor's Considerate Constructors certificate of membership

Certificate of Membership

Presented to

NW3 Builders Ltd

For membership period

04 December 2014 to 04 December 2015

This company has registered with the Considerate Constructors Scheme and has committed to adhering to the Scheme's Code of Considerate Practice in the following five sections:

Care about **Appearance**	Respect the **Community**	Protect the **Environment**	Secure everyone's **Safety**	Value their **Workforce**

Mike Petter
Chairman, Considerate Constructors Scheme

Reg No: C1167 Member Since: December 2014
Issue Date: 09 December 2014

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6. Appendix B: national background map data for area surrounding application site

X/Y coordinates closest to application site are: 530500,188500

Haringey, London Borough of

Estimated Background Air Pollution Maps (base year 2011) downloaded from http://uk-air.defra.gov.uk/data/laqm-background-home. Total annual mean concentrations based on 1 km x 1 km grid squares are provided. The contributions from emissions inventory sources are provided separately for the sources within the 1 km x 1 k

Concentrations are as ug.m-3 gravimetric PM10

Local_Auth	x	y	geo_area	EU_zone_a	Total_PM1	Motorway_	Motorway_	Trunk_A_R	Trunk_A_R	Primary_A_	Primary_A_	Minor_Rd+	Minor_Rd+	Brake+Tyre	Brake+Tyre	Road_Abra	Road_Abra	Industry_ir	Industry_o	Domestic_i	Domestic_	Rail_in_11	Rail_out_1	Other_in_1	Other_out_	PM_secon	Residual+S	Point_Sour
339	529500	191500	5	1	21.78545	0	0.031392	0	0.001056	0.122636	0.278581	0.108509	0.354471	0.324109	0.765485	0.115601	0.289123	0.080097	0.44974	0.025381	0.151899	0.016405	0.045408	0.22144	0.647781	8.12558	9.607303	0.023454
339	530500	191500	5	1	21.96999	0	0.03001	0	0.000952	0.081519	0.279091	0.16589	0.366859	0.282261	0.770904	0.103677	0.290913	0.050916	0.462382	0.054107	0.151015	0	0.046345	0.161086	0.685912	8.091431	9.870169	0.024558
339	531500	191500	5	1	21.1052	0	0.029256	0	0.000863	0	0.297378	0.104724	0.387947	0.086305	0.811998	0.030327	0.306179	0.021338	0.470402	0.031569	0.157197	0	0.039621	0.090277	0.720437	8.091431	9.403132	0.024818
339	532500	191500	5	1	22.04702	0	0.028834	0	0.000789	0.126957	0.297812	0.107341	0.38481	0.306038	0.804128	0.108909	0.303075	0.024386	0.483285	0.033406	0.154717	0	0.034602	0.098063	0.756748	8.091431	9.872252	0.02944
339	533500	191500	5	1	22.36113	0	0.028037	0	0.000728	0.040962	0.325525	0.18023	0.377122	0.169506	0.840135	0.062465	0.315417	0.19866	0.48964	0.029089	0.153061	0	0.031771	0.336246	0.781258	8.091431	9.873524	0.036319
339	534500	191500	5	1	22.03946	0	0.027583	0	0.000676	0.00453	0.324113	0.17683	0.374794	0.12255	0.81859	0.043414	0.307525	0.160162	0.56336	0.039047	0.146516	0.001769	0.028912	0.416065	0.833125	8.091431	9.515176	0.043289
339	528500	190500	5	1	20.89717	0	0.030846	0	0.001133	0	0.278461	0.160508	0.35464	0.146569	0.755779	0.051623	0.285268	0.033723	0.448648	0.048501	0.156624	0	0.046064	0.11658	0.651082	8.12558	9.183113	0.022428
339	529500	190500	5	1	20.90959	0	0.028639	0	0.000961	0	0.275133	0.143804	0.380978	0.12653	0.766722	0.044419	0.28852	0.033661	0.456487	0.045767	0.161182	0.016797	0.045933	0.091454	0.681463	8.12558	9.171817	0.023744
339	530500	190500	5	1	22.1202	0	0.027457	0	0.000878	0.099297	0.273405	0.215324	0.389072	0.304548	0.767271	0.112249	0.288353	0.051304	0.453629	0.042871	0.16335	0.015853	0.048768	0.214967	0.684502	8.091431	9.850391	0.025287
339	531500	190500	5	1	22.76123	0	0.026704	0	0.000802	0.094047	0.297807	0.233737	0.408734	0.333533	0.813458	0.121912	0.305491	0.046801	0.475016	0.061552	0.165991	0	0.047389	0.216192	0.734865	8.091431	10.2598	0.025971
339	532500	190500	5	1	23.01246	0	0.026294	0	0.000736	0.160315	0.30645	0.153372	0.422641	0.407426	0.836031	0.14767	0.313556	0.046094	0.492411	0.038793	0.1718	0	0.039746	0.175553	0.780373	8.091431	10.37161	0.030156
339	533500	190500	5	1	23.55498	0	0.025565	0	0.000679	0.171156	0.322675	0.180653	0.409859	0.409061	0.847176	0.150734	0.316697	0.061948	0.515953	0.051529	0.163365	0	0.03572	0.226636	0.821683	8.091431	10.71792	0.034534
339	534500	190500	5	1	22.54873	0	0.025156	0	0.000631	0.095939	0.339641	0.167461	0.394196	0.275249	0.845943	0.097682	0.316389	0.066105	0.556371	0.038688	0.157072	0.001769	0.032408	0.162195	0.897713	8.091431	9.949716	0.036979
339	528500	189500	5	1	21.48611	0	0.02808	0	0.001011	0.057922	0.289099	0.207236	0.365623	0.231889	0.778182	0.082961	0.292161	0.061966	0.443183	0.057918	0.165006	0	0.049085	0.142199	0.659291	8.082438	9.463943	0.02692
339	529500	189500	5	1	21.50307	0	0.026122	0	0.000872	0.09032	0.276768	0.11052	0.39972	0.239822	0.773064	0.086438	0.28949	0.023203	0.460289	0.031646	0.173164	0	0.050251	0.087949	0.692557	8.082438	9.579915	0.028521
339	530500	189500	5	1	22.0219	0	0.025142	0	0.000809	0.100226	0.288628	0.161665	0.412519	0.253507	0.800789	0.091067	0.299498	0.051862	0.469123	0.031742	0.178004	0.02205	0.04886	0.138689	0.726011	8.053304	9.841802	0.026606
339	531500	189500	5	1	23.5946	0	0.024387	0	0.000747	0.163938	0.295899	0.214018	0.431141	0.431727	0.818294	0.160362	0.305186	0.056994	0.489513	0.065717	0.17884	0.009823	0.051811	0.159499	0.781163	8.053304	10.87511	0.027131
339	532500	189500	5	1	22.49167	0	0.024022	0	0.00069	0.048204	0.326844	0.18197	0.442689	0.252096	0.874779	0.089836	0.326354	0.047817	0.502538	0.04866	0.183062	0	0.047637	0.161104	0.822436	8.053304	10.02727	0.030364
339	533500	189500	5	1	23.96437	0	0.023347	0	0.00064	0.202176	0.326418	0.230971	0.42319	0.472987	0.858085	0.172713	0.319263	0.063175	0.522229	0.056339	0.173326	0	0.04073	0.230277	0.856087	8.053304	10.90631	0.032799
339	534500	189500	5	1	23.61671	0	0.022945	0	0.000595	0.233151	0.330494	0.135874	0.405422	0.429717	0.839707	0.153858	0.312934	0.092244	0.539895	0.021733	0.168043	0.007076	0.035056	0.432469	0.853182	8.053304	10.5147	0.034316
339	527500	188500	5	1	21.57414	0	0.028213	0	0.000952	0.165524	0.273867	0.064933	0.360221	0.317373	0.757432	0.11378	0.284653	0.041159	0.446381	0.022197	0.1713	0	0.058082	0.067072	0.653247	8.082438	9.638592	0.026721
339	528500	188500	5	1	21.49821	0	0.025561	0	0.000897	0.085567	0.287748	0.119504	0.385585	0.24336	0.786556	0.086846	0.293977	0.015407	0.461447	0.030106	0.178094	0	0.055474	0.059325	0.683232	8.082438	9.589441	0.027649
339	529500	188500	5	1	21.46476	0	0.023821	0	0.000788	0.040425	0.293626	0.115337	0.420009	0.156473	0.813848	0.055836	0.303064	0.030496	0.473946	0.04142	0.188571	0	0.054471	0.081204	0.732214	8.082438	9.527153	0.029614
339	**530500**	**188500**	**5**	**1**	**22.64307**	**0**	**0.02301**	**0**	**0.000745**	**0.099352**	**0.295747**	**0.213613**	**0.429374**	**0.292181**	**0.819694**	**0.104516**	**0.30508**	**0.076963**	**0.484798**	**0.066184**	**0.192326**	**0**	**0.0563**	**0.242108**	**0.762624**	**8.053304**	**10.09732**	**0.027831**
339	531500	188500	5	1	22.7632	0	0.022236	0	0.000696	0.068208	0.318501	0.200665	0.445889	0.277775	0.859826	0.099496	0.319433	0.053541	0.508219	0.057011	0.193003	0.028701	0.052824	0.176426	0.827215	8.053304	10.17191	0.028322
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339	528500	187500	5	1	21.56733	0	0.02347	0	0.000789	0.047602	0.281857	0.189069	0.397696	0.260359	0.774135	0.09235	0.288601	0.053079	0.475564	0.048368	0.190367	0	0.067061	0.098097	0.722368	8.082438	9.445899	0.028156
339	531500	187500	5	1	23.15924	0	0.020374	0	0.000648	0.093649	0.357664	0.136346	0.46803	0.290754	0.924519	0.105022	0.342014	0.034129	0.536473	0.030818	0.211644	0.031826	0.056194	0.131713	0.891939	8.053304	10.41253	0.029652