



Transformation of the Ugly Brown Building – Plot C

Air Quality Neutral Assessment

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Comments

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1. Introduction

Overview

Waterman Infrastructure & Environment Limited has been instructed by Reef Estates Limited to undertake an air quality neutral assessment in relation to Plot C of the Transformation of the Ugly Brown Building, 2-6 St Pancras Way, in the London Borough of Camden (LBC).

In March 2020, a planning application (2017/5497/P) was granted planning permission for the following development:

'Demolition of the existing building (Class B1 and B8) and erection of 6 new buildings ranging in height from 2 storeys to 12 storeys in height above ground and 2 basement levels comprising a mixed use development of business floorspace (B1), 73 residential units (C3) (10xstudio, 29x1 bed, 27x2 bed 7x3 bed), hotel (C1), gym (D2), flexible retail (A1 - A4) and storage space (B8) development with associated landscaping work'.

In November 2023, an air quality assessment was prepared to discharge Planning Condition 26 which read; *'Prior to the commencement of Plot C an Air Quality Assessment (AQA), solely for Plot C, shall be submitted to and approved in writing by the Local Planning Authority.'*

In February 2023, LBC requested an up-to-date Air Quality Neutral Assessment. This air quality neutral assessment has been undertaken to demonstrate how the Proposed Development would meet the air quality neutral benchmarks and discharge the Air Quality Neutral prior to commencement condition.

Assumptions, Exclusions and Limitations

For a conservative assessment, plant and residential store floorspace have been excluded from the calculations.

Proposed Development

The total amount of floorspace proposed by the Proposed Development, relevant to the Air Quality Neutral Assessment criteria, is set out below in **Table 1**.

Table 1: Proposed Development Floorspace

Land Use	No. Residential Units	Floorspace Area GIA (m ²)
Residential	69	6547.8
Office	N/A	33247.2
Leisure	N/A	595.2
Retail	N/A	4,710.9
Total		45,101.1

2. Planning Policy

The London Plan, March 2021

Policy SI1 Improving air quality of the Mayor of London's London Plan¹ states that:

"...a) development proposals must be at least Air Quality Neutral..."

The Mayor's Air Quality Strategy 'Clearing the Air', 2010

Similarly, the Mayor's Air Quality Strategy² states that:

"New developments in London shall as a minimum be 'air quality neutral' through the adoption of best practice in the management and mitigation of emissions".

London Plan Guidance, Air Quality Neutral, February 2023

The Air Quality Neutral Guidance, February 2023³, hereafter referred to as the 'Air Quality Neutral Guidance' provides an update to the Air Quality Neutral Planning Support guidance from April 2014. The Air Quality Neutral Guidance details how developments are required to submit an Air Quality Neutral assessment that demonstrates how the development would meet the air quality neutral benchmarks.

The Air Quality Neutral Guidance states that a development must meet both the building and transport emission benchmarks separately to be Air Quality Neutral. If one or both benchmarks are not met, appropriate mitigation or offsetting will be required provides a methodology required to apply the air quality neutral policy.

The 'Excluded development' section of the Air Quality Neutral Guidance sets out that developments which do not include additional emissions sources are assumed to be Air Quality Neutral and do not need an Air Quality Neutral assessment. Examples of excluded development include developments that have no additional motor vehicle parking, do not lead to an increase in motor vehicle movements and do not include new combustion plant such as gas-fired boilers.

¹ Greater London Authority. 2021. The London Plan: The Spatial Development Strategy for Greater London, March 2021, GLA, London.

² Greater London Authority (GLA), 'The Mayor's Air Quality Strategy: Cleaning London's Air', London, 2002.

³ Mayor Of London. 2023. London Plan Guidance, Air Quality Neutral, February 2023.

3. Air Quality Neutral Assessment

The Air Quality Neutral Assessment of the Proposed Development has been based on the approach and methodology detailed within the Air Quality Neutral Guidance. The calculations are presented below.

Transport Emissions

The transport emissions benchmark (TEB) was calculated by multiplying the approximate floorspace with the benchmarked trip rates for Inner London.

Details of the trip generation per day were provided Caneparo Associates.

The Air Quality Neutral Guidance states the TEB only estimates car or light van trips generated by the development occupiers. The TEB does not include trips generated by deliveries and servicing, taxis or heavy vehicle movements from non-occupiers. Assessment of these trips were captured in the November 2023 Air Quality Assessment.

The transport emissions benchmark and the total transport emissions for the Proposed Development are presented in **Table 2**.

Table 2: Calculation of the Benchmarked Transport Emissions

Land Use	Number of Residential Units	Floorspace (GIA)	Benchmark		Proposed Development	
			Trip Rates Inner London*	TEB	Movements Per Day	Movements Per Annum
Residential	69	N/A	114	7866	176	46,660
Office	N/A	33247.2	1	33247		
Leisure	N/A	595.2	10.5	6250		
Retail	N/A	4,710.9	139	654,818		
Total	69	38553.3		702,181	176	46,660

*Trip rates obtained from The Air Quality Neutral Guidance, February 2023

As shown in **Table 2**, the 46,600 annual vehicle trips generated by the Proposed Development would be less than the TEB of 702,181.

The Proposed Development is therefore 'Air Quality Neutral' in relation to transport emissions, and no further mitigation measures would be required.

Building Emissions

In accordance with the Air Quality Neutral Guidance, it can be assumed that the Building Emissions Benchmark (BEB) is met if the new the new heating system is a heat pump or other zero-emission heat source.

The Proposed Development would be served by air source heat pumps, which would not give rise to any significant adverse air quality impacts.

The Proposed Development would provide two diesel generators, located at roof level of Plots C2 and C3. These generators would only be used for life safety and would not be used at other times when electricity is available from the grid. A building management plan would be produced on

completion of the Development, stating these generators would only be used for life safety and would not be used at other times when electricity is available from the grid.

Section 3.3 Generators of the Air Quality Neutral Guidance states '*Backup plants installed for emergency and life safety power supply, such as diesel generators, may be excluded from the calculation of predicted building emissions. Normally, it is expected that the use of these generators for anything other than an emergency and operational testing (less than 50 hours per year) would be prevented by planning conditions. The NO_x and particulate matter emissions of generators used for purposes other than an emergency, such as selling power into the national grid, must be included in Air Quality Neutral calculations.*'

The diesel generators would be used for emergency and operational testing only. The operational testing would be for approximately one hour a month (totalling 12 hours a year) significantly less than 50 hours a year. The diesel generators have therefore been excluded from the air quality neutral calculations. LBC agreed the requirement for BEB calculations for the generators was not required on the 18th May 2023.

The Proposed Development was therefore considered to be 'Air Quality Neutral' with respect to building emissions, and no further mitigation measures would be required.

4. Conclusions

The Proposed Development would be 'Air Quality Neutral' with respect to transport and building emissions.

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