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*Our ref:* RF/CMD/GM11595/002 *Date*: 18th December 2020
*Your ref:*

Jaspreet Chana
London Borough of Camden
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London
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Dear Jaspreet

**70 Gray's Inn Road, London – Air Quality Basic Assessment**

Wardell Armstrong has been instructed to undertake an air quality assessment for a proposed change of use at 70 Gray's Inn Road in central London.

The building which is subject to the change of use is a seven-storey self-contained building, including the lower ground floor. Gray's Inn Road lies to the west, Portpool Lane to the north and Verulam Street to the south. A small area of open land is located to the east, beyond which lie residential areas.

The proposals are for the change of use of part of the existing building from Class E Office to Class F1 Educational Space. The floorspace for the change of use is 1,900m$^2$.

The building is located within the administrative area of London Borough of Camden (LBC), which is responsible for the management of local air quality.

**Local Authority Consultation**

Email correspondence was undertaken with LBC on 15th January 2020. A proposed methodology was provided by email and a response was received from Mr Tom Parkes, Senior Air Quality Officer, on the same day.

Mr Parkes advised that bespoke advice is not usually provided to consultants, except through the 'pre-planning application advice' service. However, links were provided to relevant air quality guidance for planning. This included the Camden Planning Guidance for Air Quality (March 2019), which enables the type of assessment required to be determined. This guidance has been taken into account in the assessment.

**Local Air Quality**

A review of the 2019 Annual Status Report (ASR) for LBC (the latest report available on its website) indicates that the entire borough has been declared as an Air Quality Management Area (AQMA). The AQMA has been declared for exceedance of the annual mean objective for nitrogen dioxide ($NO_2$) and the 24-hour mean objective for fine particulate matter ($PM_{10}$).

The 2019 ASR provides details of the air quality monitoring that it currently undertakes within the borough. The 2019 ASR provides details of four automatic and 33 non-automatic monitoring locations. The closest LBC-operated monitoring location to the site is the London Bloomsbury automatic monitor, which is an urban background location. This is located approximately 0.9km to the north west in Russell Square Gardens.

The 2019 monitoring data for the London Bloomsbury automatic monitor is detailed in Table 1.

**Table 1: 2019 Monitoring Data for London Bloomsbury Automatic Monitoring Location**

| Pollutant | Annual Mean Concentration ($\mu g/m^3$) | Data Capture (%) |
|---|---|---|
| Nitrogen Dioxide ($NO_2$) | 32 | 97.7 |
| Fine Particulate Matter ($PM_{10}$) | 18 | 91.6 |

Data has also been obtained from the 2018-based default concentration maps provided by Defra on their Local Air Quality Management (LAQM) web pages[1]. The background pollutant concentrations for the appropriate 1km x 1km grid square are detailed Table 2, overleaf.

[1] Accessed at: https://uk-air.defra.gov.uk/data/laqm-background-home

| Table 2: Background Air Pollutant Concentrations Obtained from the 2018-Based Defra Default Concentration Maps | | |
|---|---|---|
| **Proposed Development Site Coordinates** | **2020 Pollutant Concentrations (µg/m$^3$)** | |
| | **Nitrogen Dioxide ($NO_2$)** | **Fine Particulate Matter ($PM_{10}$)** |
| 531000, 181500 | 41.53 | 19.04 |

The background $PM_{10}$ concentrations from the London Bloomsbury monitor and the Defra maps are similar, although there is some difference in the background $NO_2$ concentrations. The annual mean air quality objective for both $NO_2$ and $PM_{10}$ concentrations is 40µg/m$^3$. If taking into account both sets of data, the background $NO_2$ concentration in the local area is considered likely to be around or just below this objective, and the background $PM_{10}$ concentration well below.

**Scope of Air Quality Assessment**

LBC has prepared planning guidance on air quality to support the policies in the Camden Local Plan 2017[2]. This provides guidance on the triggers for an air quality assessment.

Table 1 of the LBC guidance has been followed to determine the type of assessment that is considered appropriate for the change of use. The results of this are set out in Table 3.

| Table 3: Air Quality Assessment Triggers | | |
|---|---|---|
| **Criteria** | **Criteria Met?** | **Discussion** |
| Scale of development | Major | In accordance with LBC pre-planning application advice (as floorspace subject to change of use is between 1,000 and 1,999m$^2$)[a] |
| Area of poor air quality | Yes | Although nearby monitoring data suggests that $PM_{10}$ concentrations are well below the objective, $NO_2$ concentrations are likely to be within 5% of the objective |
| Scheme brings sensitive receptors | No | No residential uses are proposed. Although users of the building will be present for more than an hour, there is no information available to suggest that exceedances of the short term (i.e. 24-hour mean) objective for $PM_{10}$ are likely |

[2] London Borough of Camden, Camden Planning Guidance: Air Quality, March 2019

| Table 3: Air Quality Assessment Triggers | | |
|---|---|---|
| **Criteria** | **Criteria Met?** | **Discussion** |
| Scheme brings air quality impacts | No | The Transport Statement suggests that there will no significant difference in trip generation as a result of the change of use |
| [a]*Accessed at: https://www.camden.gov.uk/pre-application-advice-major-developments* | | |

Following through these criteria, this suggests that a basic air quality assessment is considered to be sufficient for the change of use. In addition, the guidance suggests that an air quality neutral assessment and the consideration of construction and demolition impacts need to be taken into account. Further information on these is included later in this letter report.

**Construction Phase Impacts**

The proposals are for the alteration of the existing building layout only and so the majority of the required construction works will take place internally.

A review of relevant guidance has been undertaken to consider the potential for significant effects during the construction phase of the proposed development. The review has taken into account guidance from the Mayor of London[3] and the Institute of Air Quality Management (IAQM)[4].

It is considered that, with site-specific mitigation measures in place, there will be a 'not significant' residual effect associated with dust and $PM_{10}$. Mitigation measures will be included within the Construction Environmental Management Plan (CEMP), which will be prepared for the site.

**Operational Phase Impacts**

The proposed change of use will provide a series of working desks, meeting rooms and communal spaces for students and staff of an educational establishment. The operation of the building will align more to an office than a traditional education establishment, as the proposals do not include formal teaching spaces (i.e. lecture theatres and seminar rooms). This will take place over a floorspace of 1,900$m^2$.

[3] Mayor of London, Sustainable Design and Construction Supplementary Planning Guidance, April 2014
[4] Institute of Air Quality Management, Guidance on the Assessment of Dust from Demolition and Construction v1.1, June 2016

A Transport Statement has been prepared by Markides Associates to accompany the planning application[5]. From this, it is understood that no car parking is proposed, due to the city centre location and the good accessibility of the site in terms of public transport.

Nearby public transport options include:

- Underground and National Rail services from the Chancery Lane and Farrington stations, which are located approximately 300m and 700m away, respectively; and
- Bus services which can be accessed from number of bus stops along Grays Inn Road and Theobolds Road. These serve a wide variety of key locations, at a frequency of at least six vehicles per hour (and in some cases, significantly more).

In addition, good footpaths and street lighting are present along Grays Inn Road and the walking routes to the closest stations; and the Transport for London (TfL) Cycle Superhighway 6 is located within 500m of the site.

At the site itself, cycle parking will be provided in accordance with the Draft London Plan (2019). For a development of its size, 30 spaces are required in total, which will be located to the rear of the building. The applicant is also exploring the possibility of providing Brompton Cycle Lockers in the reception area.

The proposed use of the building will result in a longer dwell time through the day as staff and students make use of the facilities provided within the co-working and learning space. Taking into account the good accessibility of the site, the lack of car parking and the provision of cycle parking within the building, it is considered that the overwhelming majority of staff and students will travel to the site using sustainable modes.

In addition, the proposed use is expected to result in similar working patterns to the current office use, and therefore a significant change to travel characteristics and trip generation is not expected.

A refuge storage area will be provided, with collection likely to be combined with the collection of waste for other tenants in the building. For any users requiring access to a disabled parking bay, there is an existing bay on Portpool Lane, and one on Baldwin Gardens.

[5] Markides Associates, Transport Statement for 70 Grays Inn Road, December 2020

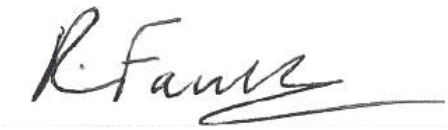
**Air Quality Neutral**

The proposals are for a change of use to an existing building. As detailed in the Transport Statement, significant changes to travel characteristics and trip generation are not expected. In addition, no changes to the existing heating plant are proposed. As a result, it is not considered likely that there will be a significant change to existing vehicle and building emissions at the premises.

**Summary**

A review has been undertaken, in accordance with relevant guidance, to consider the potential for air quality impacts during the construction and operational phases of the proposed development. This review suggests that any effects should not be significant and that significant changes to vehicle and building emissions are not expected.

**Yours sincerely**
**for Wardell Armstrong LLP**



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