

Ensafe Consultants Capital Business Centre 22 Carlton Road South Croydon CR2 OBS

21 May 2020

To whom it may concern,

# Air Quality Assessment Francis Gardner Apartments (AQ108616)- Technical Response

Ensafe have been requested to provide a formal response to comments raised by Camden Borough Council regarding the findings of the 'Air Quality Assessment, Francis Gardner Apartments, REC February 2020, Ref: AQ108616R1' undertaken for the proposed development.

This technical response is issued alongside a revised report 'Air Quality Assessment, Francis Gardner Apartments, REC May 2020, Ref: AQ108616R2', which has been updated to reflect the comments discussed in the responses below.

REC was acquired by Ensafe Consultants in October 2019 and from 2nd March REC has been trading as Ensafe Consultants only.

The following sections detail the responses to each relevant comment relating to air quality.

Issue 1

### LBC Comment

Table 8 (Page 11) states that the annual mean pollutant concentrations as measured by our automatic air quality monitoring site at Swiss Cottage/Finchley Road. The report incorrectly presents the annual mean NO2 concentration as being 34µg/m3 in 2017 and 32µg/m3 in 2018 (i.e. both compliant with the 40µg/m3 legal limit for NO2). Camden's Air Quality Annual Status Report for 2018 states clearly that the measured concentrations at this site were 53µg/m3 in 2017 and 54µg/m3 in 2018 (i.e. not compliant with the legal limit). Similarly, the report states the annual mean for PM10 as being 19 µg/m3 in 2017 and 17 µg/m3 in 2018 (within the legal limit of 40 µg/m3 but not the WHO air quality guideline of 20 µg/m3). Camden's Air Quality Annual Status Report for 2018 states clearly that the measured concentrations at this site were 20µg/m3 in 2017 and 21µg/m3 in 2017 and 21µg/m3 in 2018 (i.e. not compliant with the WHO guidelines). These are serious and fundamental errors. ACTION: The AQA must be corrected to reflect the actual reported air quality.

### Ensafe Response

- The Air Quality Assessment has provided data for the closest Automated Monitoring Station to the application site (CD1-Swiss Cottage) as is standard methodology. It is acknowledged that the values presented for 2017 and 2018 were not correct. This error has been amended in AQ109616r2.
- CD1-Swiss Cottage automatic monitor is kerbside within close proximity to major road sources; these conditions are not representative of the application site. As such, the CD1 automatic monitor wasn't used in this assessment process, but was provided in Table 8 for completeness. It is acknowledged that this should have been made clear in Section 4.2 ad has been revised in AQ109616r2.



- An annual mean NO<sub>2</sub> concentration of 26.9  $\mu$ g/m<sup>3</sup> and PM<sub>10</sub> concentration of 17.2  $\mu$ g/m<sup>3</sup>, were used to represent background levels across the site, sourced from DEFRA Background maps for 2018, as detailed in Table 10 as is stated in Appendix II.
- It is not considered necessary to revise modelling results and the conclusions of the assessment remain valid.

# Issue 2

# LBC Comment

Tables 10 presents Defra-modelled pollutant background factors, which includes a future prediction (to 2022). Camden Planning Guidance – Air Quality section 3.5 (b) is very clear that "Modelling should not predict improvements to future years (future vehicle emissions or future background concentrations)." Table 18 and Figs 7 and 8 in Appendix 1 should therefore be updated to show the implications based on the current (and not predicted) air quality. ACTION: Modelling should be revised to not include predictions and the report updated.

# Ensafe Response

- Although 2022 data is provided in Table 10 this data has not been used for the assessment purpose. Appendix II states "Similar to emission factors, background concentrations for 2018 were utilised in preference to the development opening year of 2022. This provided a robust assessment and is likely to overestimate actual pollutant concentrations during the operation of the proposals."
- It is acknowledged that Table 10 is misleading but the comparison data was presented for 2022 to demonstrate a more conservative assessment process. Table 10 in AQ109616r2 has been modified for clarity.
- It is not considered necessary to revise modelling results and the conclusions of the assessment remain valid.

### Issue 3

### LBC Comment

In Section 5.2 ('Operational Phase Assessment') it is stated that the AQ monitoring data suggests that there are unlikely to be any exceedances of the legal limits for NO2 and PM10 at the site of the proposed development. This is an incorrect assumption due to the data error and modelling of predicted pollution. The conclusion states that 'the site is considered to be suitable for residential use without the implementation of mitigation techniques to protect future site users from elevated NO2/PM10 concentrations. The conclusion (section 6, Page 26) repeats this statement.

This conclusion is incorrect due to the concerns raised in Issues 1 and 2 and therefore not valid. ACTION: Following correction of the errors and removal of predictions, the report must reconsider any conclusions, recommendations and appropriate mitigation.

### Ensafe Response

- The concerns over underprediction of application site pollutant concentrations is acknowledged and addressed in responses to Issue 2 and Issue 3.
- It is further acknowledged that the way some information has been presented in the assessment lacked clarity. A revised report AQ109616r2 is issued in response to alleviate these concerns.
- The assessment follows current and appropriate guidance and methodology and has presented a robust and conservative assessment which concludes the site is considered to be suitable for residential use without the



implementation of mitigation techniques to protect future site users from elevated  $NO_2$  and  $PM_{10}$  concentrations. It is not considered necessary to revise modelling results and the conclusions of the assessment remain valid.

#### Issue 4

### LBC Comment

There are a number of errors in the construction phase assessment (section 5).

- The earth works are stated in the text as medium (despite being below 2500m2) but in Table 14 as small
- The demolition is of a building 10-20m above ground and of a brick building, which is therefore potentially dusty which should be considered a medium risk
- It is not clear if the construction will include piling or use of concrete which would therefore pose a medium risk.
- ACTION: The construction phase assessment should be revisited, corrected and appropriate mitigation recommended.

#### Ensafe Response

- Table 14 has an error and the magnitude of Demolition should be stated as "medium". This has been corrected in n AQ109616r2.
- It is acknowledged that under the GLA risk methodology the construction element could be considered a medium magnitude of impact. This would mean the construction phase should be considered of "medium" rather than "Low" risk, AQ109616r2 has been modified to reflect this.
- The overall mitigation measures provided to reduce the risk during the demolition and construction phase are presented for a "medium" risk site.

We trust these responses and revised report of in accordance with the expectations of Camden Borough Council and address concerns over air quality related matters.

Yours Sincerely For and on behalf of Ensafe Consultants

Matthew Mitchell Associate Director – Air Quality mmitchell@ensafe.co.uk