Air Quality Technical Note

Land South of Oriel Street, Liverpool - Phase 1

Presented to Smith Young

Issued: 24th June 2019

Delta-Simons Project Number: 17-1190.03a

1. Introduction

- 1.1 Delta-Simons Environmental Consultants Limited was instructed by Smith Young (the 'Client') to prepare an Air Quality Assessment in support of the planning application for a residential development on land south of Oriel Street, Liverpool (the 'Site'). It is understood the Client will be undertaking a phased approach to the development, to which this technical note is in reference to the first Phase (Phase 1).
- 1.2 The proposal for Phase 1 comprises the erection of connected buildings ranging from 6 to 11 storeys containing 240 residential apartments in a mix of studios, 1 and 2 bedrooms (including 5% fully accessible units), cycle parking, car parking at lower and upper ground levels totalling 85 spaces (35% provision for apartments), 645 sqm GEA of lower ground / ground floor mixed commercial uses in 13 units with a variety of proposed uses (A1, A2, A3, A4, B1(a), D1 and / or D2), with green / brown roofs, roof terrace and public realm works with associated hard and soft landscaping and water gardens as part of SUDS drainage. Reference should be made to **Figure 1** for a Site Location Plan, which includes the red line boundary for both Phase 1 and Phase 2.
- 1.3 The development has the potential to cause air quality impacts at sensitive locations. These may include fugitive dust emissions associated with construction works and road traffic exhaust emissions from vehicles travelling to and from the Site during the operational phase. Future residents may also be exposed to any existing air quality issues at the Site. An Air Quality Assessment was therefore undertaken in order to determine baseline conditions and consider potential effects as a result of the proposals.
- 1.4 Following submission of the original Air Quality Assessment a consultation response was received from the Environmental Health Department at Liverpool City Council (LCC). This indicated that the dispersion model should be revised to include 2017 air quality monitoring results. The results of the amended assessment are provided in a Revised Air Quality Assessment Report (RAQAR, dated: 22nd March 2019).
- 1.5 Subsequent to the preparation of the RAQAR a decision has been made that the Site is to be developed in phases and form two separate applications. LCC has requested the following in relation to the revised application:

'In terms of the second application, as with the 'shrunk' application, we'll need to have all supporting documents tailored specifically to each site please.'

1.6 This technical note is intended to address LCC's requirements in relation to the RAQAR (ref. 17-1190.01, dated: 22nd March 2019) and should not be read separately.

2. Response

Background

- 2.1 In the RAQAR, the potential construction phase air quality impacts from fugitive dust emissions were assessed as a result of earthworks, construction and trackout activities. It is considered that the use of good practice control measures would provide suitable mitigation for a development of this size and nature and reduce potential impacts to an acceptable level.
- 2.2 Potential impacts during the operational phase of the proposals may occur due to road traffic exhaust emissions associated with vehicles travelling to and from the Site. Dispersion modelling was therefore undertaken in order to predict pollutant concentrations at sensitive locations as a result of emissions from the local highway network both with and without the development in place. Results were subsequently verified using local monitoring data.



- 2.3 Review of the dispersion modelling results indicated that predicted air quality impacts as a result of traffic generated by the development were not significant at any sensitive location in the vicinity of the Site.
- 2.4 The results of the RAQAR also indicated pollution levels to be below the relevant criteria at all locations across the Site. As such, the location is considered suitable for the proposed residential end-use, and the revision did not affect the conclusions of the original assessment.

Discussion

- 2.5 While individual effects of each Site have not been considered separately as part of the RAQAR, their in-combination effect is predicted to be negligible. The change in the development schedule (phased approach) does not result in changes in anticipated effects associated with the construction or operational phases (i.e. building volume or additional traffic generated by the proposals) and as such, the RAQAR is considered to be suitable to identify potential impacts associated with each phase.
- 2.6 The RAQAR was undertaken following best practice guidance and methodology and most up to date datasets. It accounts for the development of both Sites simultaneously, and therefore considered to be a robust representation of the likely effects associated with each of the Sites separately. This approach is also considered to be a suitable assessment of likely in-combination effect of both Sites, should they have been assessed separately, thus resulting in a robust assessment approach.

3. Conclusion

3.1 Based on the above, it is considered that the Revised Air Quality Assessment Report (dated: 22nd March 2019) is a suitable representation of likely effects associated with both Sites and therefore separate consideration of the Sites is not required.

Yours sincerely **Delta-Simons**

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Figure 1 - Site Location Plan





