

TECHNICAL ADDENDUM IN RESPECT OF AIR QUALITY, ODOUR AND CONTAMINATED LAND IMPACTS ON LAND AT NEWGATE LANE (SOUTH), FAREHAM

Introduction

This Technical Note responds to a minor change in the site description and the illustrative framework masterplan (Dated 23.08.2019).

The Technical Note deals with each of the identified technical issues and provides commentary as to whether there is a material or significant change in our previous conclusions.

Site description

The proposed development location has the old Newgate Lane Road running along its western boundary with the new Newgate Lane Road on its eastern boundary. Woodcote Lane, a small residential street is located to the south of the site. The proposed development is located within Fareham Borough Council (FBC) and will seek consent for “up to 115 dwellings”, as opposed to the “up to 125 dwellings” previously proposed. What this means is that a parcel of residential development land on the west of the site is removed and the play area is relocated slightly further south. No other changes are proposed. The illustrative framework masterplan is identified in **Figure 1** below.

Figure 1: Illustrative Framework Masterplan



Air Quality

As identified by the constraints assessment (ACCON Report A3298/AQ/South/002, dated 17.04.2019), there were no exceedances of the NAQO's for NO₂, PM₁₀ or PM_{2.5} at any of the proposed development receptors for the projected completion year of 2020. The highest modelled NO₂ concentration and PM₁₀ concentration at sensitive development receptors were identified as 15.8µg/m³ and 14.5µg/m³ respectively which are significantly below the annual mean NO₂ and PM₁₀ Air Quality Objective (AQO) values of 40µg/m³.

Whilst, since ACCON's original air quality reporting was completed, new background concentration mapping and a revised Emissions Factor Toolkit (V9.0) have now been published by DEFRA, it is our professional opinion that at the development receptors previously identified the pollutant concentrations would continue to remain significantly below the Air Quality Objective levels. This consideration is reinforced by the fact that originally our air pollutant concentration modelling was for an opening date of 2020 which would have resulted in worst-case levels when compared to a later more realistic opening date for the development.

As the pollutant concentrations are significantly lower than the AQO's it is not deemed necessary to include any mitigation measures for the proposed development.

Odour

As identified in the odour assessment (ACCON Report A3298//South/Odour/002, dated 17.04.2019) the potential constraints arising as a result of odour from the nearby Waste Water Treatment Works (WwTW) were assessed with detailed odour modelling of the WwTW. The WwTW is located to the west of the proposed development site. In addition, the presence of a significant buffer (175m) between the proposed development site boundary and the WwTW boundary, and now over 400m between the closest sensitive residential receptor, which has moved eastward on the illustrative framework masterplan, ensures that there is significant dilution between source and receptor even under adverse meteorological conditions.

A qualitative assessment of odour from the existing wastewater treatment works was carried out over two separate visits (covering a variety of meteorological conditions) to determine whether the proximity of the proposed residential development could result in nuisance occurring to occupiers of the proposed properties. That assessment concluded that odours were only considered to be distinctive on the boundary of the WwTW when assessed under 'summer conditions'.

The detailed dispersion modelling previously concluded that at all of the proposed residential receptor locations (high sensitivity receptors), the 98th percentile hourly mean odour concentrations are below the 30u_E/m³ benchmark and as such the WwTW is not anticipated to have an adverse impact on the proposed residential development. The odour contours identify that the 30u_E/m³ contour does slightly encroach on the south-west corner of the proposed development site. The dispersion modelling considered multiple years of meteorological data and used worst-case assumptions where possible.

The revised location of the residential properties moving eastwards away from Newgate Lane ensures that there is even less likelihood of odour resulting in an issue for the proposed occupiers of properties on the development.

Contaminated land

As identified by the Phase I Contaminated Land Assessment (ACCON Report A3298/South/CL/002, dated 17.04.2019), the purpose of the Phase I Contaminated Land Assessment was to develop an outline Conceptual Model for the site and to identify any potential pollutant linkages for the site and its surroundings, providing an assessment of the overall environmental condition of the site and its potential to impact the surrounding environment. Where the Phase 1 report identifies that there is a risk of contaminants being present on the site and that these potential contaminants may pose a risk to sensitive receptors, or if there are any significant data gaps, a more intrusive Phase 2 survey would be required.

For this site, the Phase 1 study has identified that there are a very small number of potential sources of contamination on the site and in close proximity to it, due to the current and historical land uses. As a result the assessment identified that there is a possibility that some contamination may remain on site, which could pose a risk to human health, controlled waters and future domestic animals, home grown produce, ecological receptors and buildings.

ACCON recommended that a limited Phase 2 Investigation should be undertaken to ascertain the potential risks from the contaminants identified within this assessment. Due to the small scale and isolated nature of the potential contaminants on the site, ACCON identified that that only a very localised invasive investigation would be required.

The previous evaluation and conclusions are not altered by the revisions to the illustrative framework masterplan, as whilst the proposed development has moved eastwards, there would remain a requirement to investigate the residential and amenity areas. The ACCON Report concluded that further site investigation was recommended as potential land contamination at the site might otherwise constrain the future development of the site.

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