Appendix 10.3: Site Suitability

Proposed Sensitive Receptors

Five proposed sensitive receptor (PSR) locations within the development site were considered in the assessment. NO_2, PM_{10} and $PM_{2.5}$ concentrations were calculated at these locations to determine whether future site users may be exposed to elevated pollutant levels. PSRs were selected at worst-case positions closest to the main sources of pollution affecting the site. The PSR locations are presented in **Table 10.7** and **Figure 10.1**. The results of the air quality assessment at the PSR locations are shown in **Table 10.3.1**.

Table A10.3.1 – Model Verification

Proposed Sensitive Receptor	2026 With the Proposed Development – Pollutant Concentrations		
	NO_2 Concentration with the Proposed Development µg/m^3	PM_{10} Concentration with the Proposed Development µg/m^3	$PM_{2.5}$ Concentration with the Proposed Development µg/m^3
PSR 1	12.16	12.06	7.67
PSR 2	9.76	11.39	7.32
PSR 3	9.37	11.28	7.26
PSR 4	9.18	11.23	7.23
PSR 5	7.78	11.42	7.29

The results of the dispersion modelling assessment indicate that annual mean concentrations of NO_2 and PM_{10} would be below the annual mean objectives at proposed residential receptors in 2026 once the development is operational. Annual mean concentrations of $PM_{2.5}$ are predicted to be below the annual mean target at all proposed residential receptors in 2026 once the development is operational.

The site is therefore considered suitable for its intended use with regard to air quality.