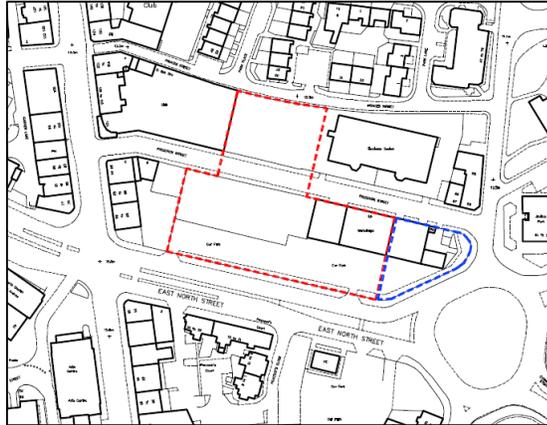


## Air Quality Aberdeen Healthcare Village



ACCON carried out a comprehensive air quality assessment of the proposed development for a new Healthcare Village facing onto East North Street and associated parking on Frederick Street. The development site itself is adjacent to the heavily trafficked A96 and the site is also close to a designated Air Quality Management Area.

The purpose of the assessment was to determine to what extent air pollution constrained the proposed health care development and the impact of the development upon local air pollution.

Crucial to the study was the nature of the development and the appropriate assessment criteria. TG(09) states that the annual mean should be used for hospital buildings, due to the sensitivity of patrons, however it could also be argued that the proposed development did not fall into this category as the building would primarily comprise treatment and consultation rooms which are not related to health concerns which might otherwise be affected by poor air quality.

The detailed air quality assessment considered the overall levels of hydrocarbons, nitrogen dioxide (NO<sub>2</sub>) and particulates (PM<sub>10</sub>) in the vicinity of the site. Verified air pollutant concentrations indicated that at two of the three prediction locations it was likely that air quality limits would be exceeded or had the potential to constrain the development.

Additional modelling of the pollutants at height showed that by installing a whole building ventilation system on the second floor within the internal courtyard of the development the building could be supplied with filtered air which would be below the air quality limits.

The predicted pollutant levels also indicated that the impact of traffic associated with the development would be insignificant.

