MCS 007 issue 4.0 Planning Standard for Air Source Heat Pumps (Pages 16, 17, 18, 19)

Description of assessment position tested:

Fraser Regnart Court is arranged around a quad with ASHP locations on the rear ground floor of each of the three ranges – North, West and South.

All the ASHP units are ground mounted against the rear wall of the dwellings (Q4 reflected sound situations).

One ASHP has been specified to provide heat/hot water for three dwellings, minimising the number of units required. Each unit operating at full power creates 61.6 dB(A), with a low noise operation at 36dB(A). There is a minimum of 8.8 metres between the centreline of each ASHP unit along each of the three ranges. Buildings along the North, West and South ranges are parallel to those ranges, so each Unit along the range has the same value.

On the South range the distance between the six ASHP locations to the habitable room windows of adjoining dwellings is 14.5 metres.

On the West range the distance between the three ASHP locations to the habitable room windows of adjoining dwellings is 35 metres.

On the North range the distance between the five ASHP locations to the habitable room windows of adjoining dwellings is 7 metres. These houses have ground floor rear extensions but are below the boundary wall.

The ground level to the South and West ranges is substantially lower (approx. 3.2 metres), than the adjoining sites (housing), with solid boundary walls in place.

A dimensioned plan is attached, together with some contextual photographs (Figs 1-4).

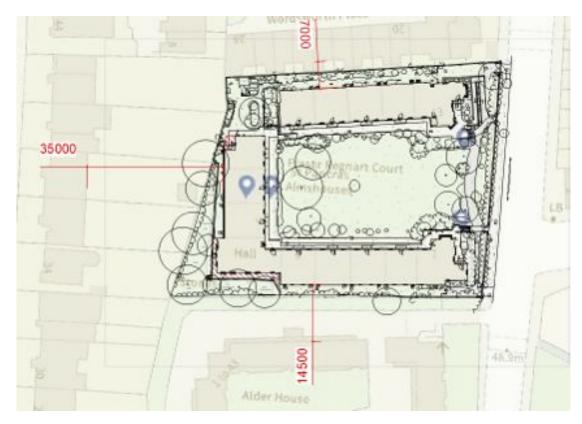


Fig.1 Plan showing adjoining buildings and dimensions from ASHP locations



Fig.2 North range rear ground floor elevation.



Fig.3 West range rear ground floor elevation.



Fig.4 South range rear ground floor elevation.