## EIA Quality Mark Case Study

**Hale – A 120 m high residential tower in Tottenham Hale, London**

### Key Issues:
The issues with developing a tall building in London namely.

- Wind funnelling (Wind tunnelling modelling was undertaken, which resulted in a number of changes to the design detailed overleaf)
- Building within an Air Quality Management Zone (Completion of air pollution modelling which showed requirement for mechanical ventilation in first 9 floors)
- Issues with overshadowing and “right to light” (Detailed modelling for adjacent properties)
- Risk of bird strike from birds at Lee Valley (Walthamstow Reservoirs) Ramsar. SSSI and SPA. (Completion of extensive bird surveys to assess risk of bird strikes)

### Purpose of the project:
WYG worked to provide multi-disciplinary consultancy to support a planning permission by Anthology.

This was submitted to London Borough of Haringey with planning permission being granted in December 2017.

### Description of the project:
As part of Anthology’s wider Hale Works masterplan to convert undeveloped plots of land into 1,210 residential units, to create a vibrant, sustainable, urban village.

The 33-story building, comprising 1,588 square metres of commercial space. It is located near the Tottenham Hale Railway Station and has been designed to address local need for amenities, affordable housing and jobs.
Lessons learnt:

The design of such a tall building was critical when it came to assessing the effects of wind funnelling. The results of the initial wind modelling led to the following changes in design.

The prevailing wind for the Tottenham Hale area is from the south west. The development has been designed so that the smallest façade is on this side to reduce the amount of downdraft to ground level.

In order to mitigate further downdraft to ground level, the development includes a ground floor podium which will dissipate the majority of downward wind protecting pedestrians and cyclists on ground level.

Lessons learnt continued:

To protect proposed residents of the development, the sky garden has been placed on the opposite side of the building to the prevailing wind speeds to provide shelter when wind speeds are from this direction. The balconies of the proposed development are also set inside the building to provide some protection from wind as they are not immediately exposed to wind circulating around the building.

The development will include raised planters containing trees which will further help to disperse wind along neighbouring streets.

The key issue being to recognise that this iterative design process takes time and to allow for this in the design/submission programme.

Contact details

Author: Erin Banks
Registrant: WYG
The Pavilion, 1st Floor, Botleigh Grange Office Campus, Hedge End, Southampton, Hampshire, SO30 2AF
Tel: +44 2382 022800
Email: erin.banks@wyg.com

For access to more EIA case studies and hundreds of non-technical summaries of Environmental Statements visit:
https://www.iema.net/eia-quality-mark/eia-quality-mark-case-studies