# EIA Quality Mark Case Study

## Crown Street

### Key Issues

There were a number of key issues that needed to be addressed through the EIA and design process:

- The site’s location adjacent to a number of historic receptors.
- The site’s location adjacent to a number of residential receptors.
- The surrounding context, including the Great Jackson Street Framework and how these future developments were considered in the EIA baseline / cumulative assessment.
- Environmental issues as a result of including tall buildings on the site – including microclimate effects on wind, daylight and sunlight.
- Health receptor issues to the new residents as a result of the site’s location adjacent to two major roads – including consideration of air quality and noise impacts.
- Cumulative construction impacts as a result of surrounding developments within the city centre.
- Scale of the proposed development and its visual impact throughout the City Centre.

### Purpose of the project

The site sits within the Great Jackson Street Framework (2018) which identifies a need for residential units on the site within Manchester City Centre. Crown Street is a residential development, set to deliver 664 units within two tall buildings, 21 and 51 storeys, to help meet Manchester’s need for new homes. A range of units are proposed including 1,2 and 3 bed apartments and town houses to provide a range of housing for not just young professionals but families too. Renaker is the developer, who has an exceptional track record in delivering homes within tall buildings in Manchester City Centre.

### Description of the project

The current use as a surface level car park is unattractive and fails to fully utilise the site. To the north and west boundary of the Site are A-Roads. Constraints includes that the site is adjacent to the southern boundary of the Castlefield Conservation Area, is adjacent to a Grade II Listed building and effects the setting of a number of other Listed buildings, including the Grade II* St George’s Church. The site is also adjacent to established residential communities in Castlefield, Hulme and the City Centre. The area is undergoing significant regeneration and there are a number of committed developments in close proximity including a development of c. 1,000 residential units across four tall buildings the tallest being 64 storeys.
Lessons learnt
Given the Site’s location adjacent to a Conservation Area and a number of historic buildings nearby, early engagement with Historic England was required in order to agree the key heritage viewpoints so that the impact of the proposals on the heritage receptors could be assessed and the design amended where necessary. From an early stage it was established that whilst the building was tall, how it is grounded and its relationship with the adjacent listed buildings and Conservation Area at the ground floor needed to be considered in the design, therefore the proposals included a brick podium level that responded to the materiality of the listed buildings and Conservation Area. Furthermore, the design of the towers evolved from being just glass to incorporate colours found in the area, with the use of bronzed metal panels and black painted glass.

At up to 51 storeys, the visual impact upon the townscape was a key consideration in terms of effects on the environment from an architectural and landscape perspective. A total of 36 views were assessed which included those from a heritage perspective and longer ranging townscape views. The views were agreed following discussions with the technical specialist and consultation with the Local Planning Authority (LPA).

Early engagement with the LPA and transport modelling were key to the development of the proposals which would result in human receptors living adjacent to major road networks. Following the 2017 EIA Regulations, human health is now one of the factors to be considered throughout EIA. The design of the proposals had to consider ways to mitigate against air quality and noise issues, including where these might give rise to significant effects on the health of the new residents. This included the inclusion of purge and mechanical ventilation, higher specification of air tightness on windows and doors at all habitable and commercial units on the ground to fifth floors, and higher glazing specification of windows where noise issues were found, via the EIA, to arise.

Lessons learnt cont. -
The early engagement and transport modelling was undertaken during, and to inform, the EIA Scoping process. The Scoping Request identified that the changes in traffic flow would be minimal when assessed against the IEMA criteria, therefore transport was able to be scoped out of the ES. Given the height of the buildings and other tall buildings within the surrounding area, a wind tunnel model exercise was required to establish if the proposals, and their cumulative impact, required mitigation. Following the wind tunnel, the design evolved to include additional landscaping treatment, and a wind screen as embedded mitigation within the design to ensure that the proposed spaces are comfortable and safe for the public to use and don’t lead to significant adverse effects.

Earlier iterations of the scheme included three buildings. On review of the height and massing by the design team and technical consultants, two buildings with a greater distance between them was seen as a more suitable option to allow greater penetration of sunlight and to improve instances of any overlooking given the surrounding residential context. Alternatives in relation to orientation of the building, footprint and exact location were also considered to further reduce impact.

Overall this project demonstrates the benefits of the iterative design and assessment process that EIA encourages and facilitates, which ultimately delivers a scheme which features environmental benefits.

Contact details
Rachel Poole
Deloitte Real Estate
rpoole@deloitte.co.uk

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