### Key Issues –
There were a number of key issues that needed to be addressed through the EIA and design process, including:

- Residential and pedestrian amenity were important considerations throughout the design process and assessment work, due to the proposed tower and block height elements within an existing urban context, along with the proposed ground-level uses and pedestrian arcade through the site. Mitigation proposals for wind included tree planting and enlarged balustrades on sensitive balconies.

- The proposed height and massing also impacted on microclimate issues of daylight and sunlight impacts, which required detailed assessment due to of the proximity of surrounding residential properties.

- The site’s location on the strategic road network, and on a key road junction, meant that traffic, and associated air quality and noise impacts, were key considerations throughout the design and consultation process. The EIA identified highways upgrades as mitigation measures, including junction upgrades and measures to ensure pedestrian and cyclist safety.

- The site’s Air Quality Management Area location meant impacts on local air quality and potential effects on sensitive receptors were considered.

### Purpose of the project
The Leegate Centre is a prominently located 1960s shopping centre, which has experienced long-term decline. Its District Centre location demonstrates its importance to regenerating the local shopping area, however planning the large site’s redevelopment brought with it a range of environmental challenges which were assessed and managed by the EIA process.

Lee Green Regeneration is a mixed-use, retail-led scheme providing modern retail floorspace within a key district centre location, with high quality residential uses above to capitalise upon the site’s sustainable location.

### Description of the project
Lee Green Regeneration involves the demolition and redevelopment of the deteriorating 1960s shopping centre, including two office tower blocks, residential apartments and a multi-storey car park. The dated architecture, low footfall, and strong local competition have facilitated the need for redevelopment.

The proposals open up the inward-facing retail precinct, introduce active retail frontages, and provide a high quality, mixed-use scheme providing c. 9,000 sqm of modern retail floorspace, with 228 new homes of mixed tenure. The scheme focuses on high quality design and landscaping principles, including a private, podium-level residents’ garden. Deloitte Real Estate gained a resolution to grant planning permission in April 2016.
Lessons learnt
Located within a key district centre location and bordering the busy south circular road, the scheme design continually evolved to mitigate a multitude of environmental impacts including traffic, noise, overshadowing, wind, visual impact, and flood risk.

Traffic was a particularly sensitive issue on this project, and early engagement with Transport for London and local highways officers was crucial in identifying appropriate measures to mitigate potential traffic impacts. The highway design which accompanies the proposals incorporates a number of mitigation measures which will serve to both reduce traffic impacts and increase pedestrian safety and amenity.

The site’s location in an Air Quality Management Area (AQMA) and at a key transport junction where two busy roads intersected, meant that air quality was a sensitive issue identified within the assessments. The proposed public square, to be located along one of the roads west of the site, added further to the sensitivity of the topic. Proposed mitigation included highways and junction upgrades to reduce traffic congestion, setting back of public open space from the road and the planting of semi-mature trees to provide a noise and air quality pollution buffer. Mechanical ventilation was included as mitigation along key frontages where road-related noise and air quality pollution were identified, to mitigate effects upon future residents.

The site encompassed a former petrol station, so the project team undertook a contamination assessment, of which the resulting mitigation measures included further ground investigations and the implementation of best practice environmental management measures.

Lessons learnt cont. –
The proposed 10 storey tower required careful consideration, as it was located on a key crossroads and near to wind-sensitive pedestrian café uses at ground level. It was important to ensure wind effects experienced at the proposed residential amenity and outdoor seating areas were kept to acceptable levels.

Early stakeholder engagement and community consultation were critical to the success of the project. The project team consulted with local residents, statutory consultees and heritage groups throughout the pre-application phase. The consultation process was helpful in terms of developing positive working relationships with neighbouring residents and local interest groups.

Design and mitigation measures which were introduced are a useful demonstration of how multiple benefits can be realised through the introduction of certain features. For example, the semi-mature trees proposed around the site provided a buffer for noise and air pollution experienced at the site. These trees also provided ecological benefits, and enhanced the overall aesthetic of the site. The buildings themselves were also useful in providing a natural buffer from effects related to the road, for example locating the residential external amenity space between the blocks ensured ecological benefits and improved drainage characteristics. Follow-up monitoring will be employed to validate air quality effects and ensure the site’s long-term sustainability.

Contact details
Mark Underwood
Deloitte Real Estate
maunderwood@deloitte.co.uk
020 7303 4089

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