



RoC  
CONSULTING

# COMPLEX CHALLENGES ... MADE SIMPLE

RoC Consulting is a highly experienced and qualified team of civil, structural, geotechnical & geo-environmental engineers

CASE  
STUDY

# AIRPORT CITY CBD, MANCHESTER

## Key facts

**Project**  
Airport City,  
CBD Baseline study

**Client**  
Airport City  
Partnership

**Value**  
£.650m Master plan

**Project duration**  
2014 - ongoing



Earth Sciences



Civil Engineering



Structural Engineering

## MASTER PLAN / MIXED USE SECTOR

### PROJECT OVERVIEW

Working on behalf of the Airport City Partnerships Limited, RoC completed a programme site investigation across the proposed Central Business District development to support completion of the wider master planning and baseline assessment for the site's development. These works included the completion of an array of 16 boreholes to establish ground conditions beneath the site and infill data gaps from previous site investigations and appraise an existing drainage network via a CCTV survey.

The proposed development includes the construction of a significant retaining wall along the existing World Way embankment. The site investigations undertaken established geotechnical design parameters for the retaining structure and building foundations.

The CCTV information was used to inform the drainage strategy for the site, the impact of the proposed development on the existing network, and whether the network served any developments beyond the proposed development airport city boundary.

### CHALLENGES

The site investigation works were completed within a busy live car park environment, and adjacent to the World Way highway, and required a proactive approach to coordination and liaison with site users and stakeholders.

Intensive project management of the investigation and drilling contractors was essential to ensure their smooth completion of minimal disruption to car park users.

### ADDED VALUE

Working in conjunction with the wider design team, and particularly the master planning architects, we were able to advise on ground related considerations so that adequate provision was made within the design to cover potential abnormal items. This included an assessment of the most cost effective foundation solution for the building foundations to the development and retaining wall structures.

Information provided by the CCTV survey confirmed the existing outfall and that the existing network served developments beyond the site boundary.

The high level drainage strategy developed for the ACN site, included partial diversion of the existing watercourse and envisaged the phased provision of attenuation on a plot by plot basis, as the most viable site wide development solution.

