

## Peacocks Centre, Woking

### Our Services

- Review of As-Built Data
- Structural Review
- Site Investigation
- Groundwater, Hydrology and Mitigation Advice



### Geotechnical and Structural Investigation

A number of units in the shopping The Peacocks Shopping Centre in Woking had suffered water ingress at floor slab intermittently during the last five to ten years.

**CGL** were asked by the centre management to investigate the sources of leakage, the groundwater regime local to the centre and the potential for mitigation measures.

**CGL** and structural engineering sub consultant Walsh Associates undertook an extensive search of the centre construction records to establish construction joint details likely to be the cause of leakage in the floor slabs.

The main diaphragm wall surrounding the basement continues to have limited seepages through it within the drained cavity of the main structure.

High groundwater identified by investigation monitoring limited the potential solutions available in the operational shopping centre.

**CGL** undertook horizontal drilling through the basement diaphragm wall to establish groundwater levels immediately below critical floor slabs. The work was done at night and established variations in “as built” construction and water table locally at or above floor slab levels.

The use of a manometer tube system has allowed centre staff to monitor groundwater behind the drained cavity on a regular basis.

Recommendations for the sealing of a specific movement joint between floor slab and raft was made and is to be implemented as tenancy agreements allow.

Client: Savills Commercial Ltd