

The Arts Depot, North Finchley, London

Our Services

- Site Investigation
- Analysis
- Modelling
- Geotechnical Advice



Analysis of Ground Movements

CGL provided geotechnical advice to structural engineers Walsh Associates for the design of a prestige multi-use development at Tally Ho Corner, Finchley, London.

This landmark mixed-use development is claimed to be the largest British project completed by a public-private partnership. It includes two basement levels, a new theatre complex, retail and leisure facilities, a bus station and a fourteen-storey residential tower.

The development process involved the construction of a contiguous pile wall around the development's footprint, excavation of the two basement levels to over 8m below existing ground level and construction of the new substructures.

The soil-structure interaction analysis was undertaken by **CGL** using sophisticated software to assess the likely behaviour of a raft foundation. A composite ground model was developed to reflect the ground profile and soil properties present across the site.

A combination of elastic settlement analysis and two-dimensional finite element analyses were then undertaken to assess the likely behaviour of the substructure. These showed that a cost-effective raft foundation solution could be employed to support the proposed development without excessive differential or total settlements being generated.

Contractor: MJ Gleeson