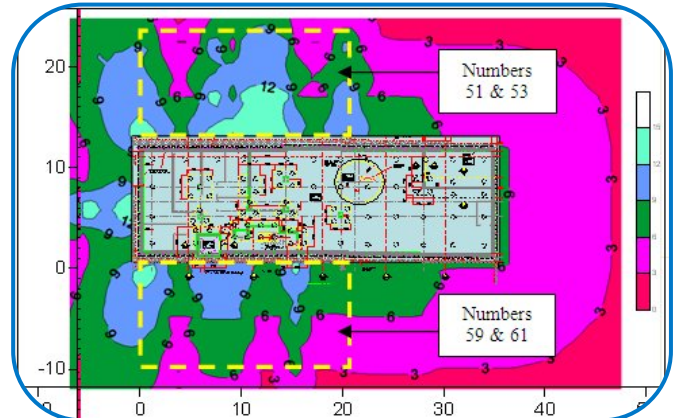


Pont Street, Knightsbridge

Our Services

- Basement Heave Analysis (VDISP)
- Retaining Wall Movements (WALLAP)
- Building Damage Assessment
- Hydrogeological Risk Assessment



Ground Movement Analysis

CGL were engaged by Galliford Try to undertake a ground movement analysis for a new 2 to 3 storey deep basement in Pont Street, Knightsbridge, constructed within a terrace of late Victorian age. The neighbouring five storey mansions on the northern and southern site boundary were very sensitive to ground movements.

CGL calculated the short term and long term movements arising due to the unloading of the underlying London Clay using VDISP software. Ground movements arising from the installation of the contiguous piled basement wall were assessed with reference to published (CIRIA C580) data and records from the nearby Harrod's development in Knightsbridge.

Retaining wall movements during construction were calculated and movement trigger limits and monitoring protocols were established to control

movements during construction with reference to limiting deflection ratios and tensile strains (Burland et. al).

The information was used to support the contractor's design of piles, temporary propping and monitoring. All of the analysis was subject to approval by party wall engineers.

CGL also provided a hydrogeological risk assessment to establish a realistic design groundwater level in the absence of continuous monitoring data across the site.

Construction is due to commence in mid to late 2011.

Client: Galliford Try Plc