

# Card Geotechnics Limited (CGL)

## CGL's Project Case Study Underpin Installation Movement Monitoring Data

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Project Background		Ground Conditions		Underpin Details						Party wall details			Date	Movement Vertical (mm)		Movement Lateral (mm)	
Project Name	Location	Soil type(s)	Groundwater (mOD)	(H) Underpin depth (mbgl)	No. of stages / lifts (#)	Type (Straight /Boot)	Reinforced? (Y/N)	Temporary Works (lateral support) (Y/N)	Workmanship Grade (1-5) 1=Poor 5=Excellent	Party wall type (Masonry / Concrete)	Wall Height (m)	Wall thickness (m)	Underpin Completion	Min (mm)	Max (mm)	Min (mm)	Max (mm)
7-14 Baker Steet	London	Gravels over Clay Bearing strata LC	Dry	3.20	2 lifts	ST with boot	No	Yes	4	Masonry	12.5	0.40-0.60	Sep-08	-	5mm	-	4mm
Pont Street	London	7.5mOD Mand Ground 5.5-6mOD Gravels 0.1mOD Clay	2.25	3.00	1 lift	Straight	No	Yes	4	Masonry	3.2	0.25	2009	-	5mm	-	3mm
62/63 Pall Mall	London	5.24mOD Made Ground, 5.24-3.74mOD Langley Silt, 1.74-2.24mOD Kempton Park -3.26 to -3.66mOD London Clay			1 lift	Straight		Yes	3	Masonry			2010	2.7mm	4.4mm	2.7mm	4.4mm
7 St James's Square	London	6.9-15.2mOD Made Ground, 6.1-8.6mOD Langley Silt, 3.4-8.1mOD River Terrace -1.7-6.3mOD London Clay			1 lift	Straight		Yes	4	Masonry			Aug-12	1mm	4.5mm	1mm	5mm
48/50 Pall Mall	London	Made Ground over Taplow Gravel Member			1 lift	Straight		Yes	4	Masonry			Sep-14	1mm	6mm	2mm	5mm
Seymour Street	London	21.37-21.38mOD Made Ground, 18.38mOD Lynch Hill Gravel, 17.58-16.17mOD London Clay			1 lift	Straight		Yes	3	Masonry			Sep-16	1mm	4mm	1mm	4mm
Corpus Christi	Oxford	61mOD Made Ground 58.2mOD Gravels 57.6mOD Oxford Clay	58.3	2.88	2 lifts	Straight	No	Yes	4	Oxford City Wall (Old Masonry)	5.3	0.60	Sep-22	1mm	4.5mm	2mm	4mm
Park Road, Cambridge	Cambridge	Made Ground and natural dry Medium Dense Gravels	Dry	1.87	1 lift	Straight	No	Yes	5	Masonry	8.0	0.40	May-22	1mm	2mm	1.5mm	2mm
St Olaves, Canada Water	London	2.5mOD Made Ground, 1.3mOD Alluvium, 0.5mOD River Terrace -5.5mOD Lambeth Group		3.00	1 lift	Straight	No	Yes	4	Masonry		0.25	Jul-23	1mm	4mm	1mm	5mm
42 Elsworthy Road	London	46.92-47.12mOD Made Ground 45.52-45.92mOD W-Lon Clay 35.12-37.92mOD London Clay	Dry	5.70	2 lifts	Straight	Yes	Yes	3	Masonry		0.40	Feb-24	1mm	5mm	1mm	4mm
65 Crutched Friars	London	13.7mOD Made Ground 8.5mOD Taplow Gravels 5.5mOD London Clay	Wet at base, but overall dry dig	4.00	1 lift	Straight	No	Yes	5	Concrete	6.7	0.75	Jun-24	1mm	3mm	1mm	2.5mm
Big Yellow, Wapping	London	10mOD Made Ground 5mOD London Clay	6	1.80	1 lift	Straight	No	Yes	4	Masonry	4.0	0.25	Mar-25	1mm	3mm	1mm	3mm