PRICE&MYERS

INFRASTRUCTURE

RADA, 16 & 18 Chenies Street, London

Monitoring Proposal

1 Introduction

The purpose of this proposal is to outline a preliminary monitoring system that will measure the effects of the proposed excavation, underpinning works and wider construction activities on the adjacent buildings and numbers 16 & 18.

2 Installation

The monitoring system will consist of 3D reflective targets and precise leveling points.

Monitoring control stations will be established around the perimeter of the site from which the monitoring targets will be surveyed. Additional survey targets will be placed on surrounding structures outside the sites zone of influence to act as control points, these points will be accurately fixed in a 3 dimensional plane. Access and permission to install these targets will need to be sought from the adjacent building owners.

The control targets will be used to establish station coordinates prior to each survey. Their coordinates will be calculated using a resection method undertaken within the survey instrument. This method of control establishment allows for accurate control to be determined without having to rely on a fixed station in close proximity to the site.

3 Reflective Targets

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Monitoring targets are to be established in the following locations:

- The rear wall of the front section of number 18 plus the flank walls and rear boundary wall.
- The external walls to the Law Building in Ridgemount Mews.

GEOMETRICS

• The Rear elevation of number 18.

Small reflective targets where necessary are to be installed using an epoxy adhesive.

4 Frequency and Duration of Readings

At this stage we anticipate the monitoring frequency to be on a weekly basis during the major groundworks. The monitoring will commence prior to the installation of the piled wall,

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underpinning or any reduced level dig. The full duration of the monitoring is yet to be established but we would anticipate this continuing through to the completion to the ground floor concrete structure. Beyond this a reduced frequency of monitoring will be undertaken.

Additional readings are to be undertaken following any unauthorized excavations or other significant events.

5 Trigger Levels

Proposed Trigger Levels are as follows:

Amber Trigger Level = 55% of maximum predicted movement Red Trigger Level = 105% of maximum predicted movement

Final trigger levels to be confirmed following further assessment of the anticipated ground movements by GEA Ltd. An initial assessment of the anticipated ground movement is provided in Document 8.

If survey readings indicating movement in excess of the Amber trigger levels are identified the Project Structural Engineer is to be notified immediately. Additional monitoring is to be put in place with an increased survey frequency as agreed with the Project Engineer. A detailed site inspection is to be undertaken and temporary works procedures on site are to be reviewed and where necessary additional support provided.

Following survey readings indicating movement in excess of the Red trigger level the works to that area of the site are to be suspended immediately and the Project Engineer notified. A full review of the proposed temporary works system will be undertaken and the proposals amended to address any deficiencies. No further works will progress until the revised proposals have been agreed with the Project Engineer. Additional monitoring will be put in place with an increased survey frequency.

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