

# **APPENDIX 4**

# SPECIFICATION FOR MOVEMENT MONITORING



# 20 WELL ROAD LONDON NW3 1LH SPECIFICATION FOR MOVEMENT MONITORING

#### INTRODUCTION

- Movement monitoring will be carried out by special contractor.
- Recommendations of BRE Digest 343 Part 2 'Simple Measuring and monitoring of movement to low rise buildings' shall be followed.
- Movements in three planes (left to right, front to back and verticality) will be measured relative to remote and stable control stations.

# **EQUIPMENT**

• All measurements will be made with suitable EDM equipment.

# **ACCURACY**

The accuracy (stated standard deviation to ISO 17123-4) in both level and plan
position shall be +/- 1mm but this is dependent upon site conditions / weather at the
time of survey.

# **MONITORING STATIONS**

 Monitoring points shall be agreed between the party wall surveyors and consulting engineer. The targets to be monitored will be adhesive backed reflective targets fixed to the walls.

#### **SURVEY CONTROL**

 Minimum of 3 reference points remote from the site. (At least 5.0m away from the site boundary)

# **PROCEDURE**

- Survey equipment shall be set up on firm a base.
- Each location will be measured in turn and readings of distance and angle, and
   Northing, Easting and height will be recorded.
- Readings will be repeated on both faces of the instrument.

# **FREQUENCY**

- Two sets of baseline readings will be taken before any excavation work commences, with an interval of no less than 5 days between the two sets of readings.
- Frequency of readings during the basement excavation works will be every two weeks.
- One final reading will be taken 4 weeks after basement works are complete.

# **TRIGGER VALUES**

# Amber Level = 5mm

 At Amber level basement construction work will cease and procedures reviewed by the project Structural Engineer to determine additional safeguards or working practices need to be implemented. Work will not restart until approval of project



Engineer. The building owner's surveyor and adjoining owner's surveyor informed of level being reached, monitoring will become more frequent at weekly intervals.

# Red Level = 8mm

- Construction works shall cease on site until a thorough review of working practice
  has been carried out by project Structural Engineer. Any additional temporary works
  shall be implemented by Contractor
- Works will not recommence until approval has been given by the Project Engineer and both the owner and adjoining owner surveyors.

# **RESULTS**

- The recorded results shall be tabulated and graphically presents in report form and issued to all relative parties
- Monitoring results shall be presented within 5 days of measuring.
- The contractor will identify trends in movement from the results before amber level is reached and assess the best course of action to take.