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29<sup>th</sup> April 2022 By email only: (vicki@suttonprojects.co.uk)

Vicki Karlsson Sutton Projects Ltd, 16 Berkeley Street, London, W1J 8DZ.

Dear Vicki,

# RE: Provisional Damp Survey - Goodenough College, 15, Mecklenburgh Square, London, WC1N 2AJ.

Tel: 020 7796 3050

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Further to our appointment on the 19<sup>th</sup> April and our subsequent site inspection on 21<sup>st</sup> April, please find enclosed our provisional damp survey report with regards to the basement flat courtyard "party wall" inspection at 15 Mecklenburgh Square, London, WC1N 2AJ.

#### 1.0 - Company Appointment

This preliminary report is based on an initial survey and inspection of the courtyard "party wall" at 15 Mecklenburgh Square and reporting on any potential sources of damp/moisture ingress into the neighbouring (basement) flat at 16 Mecklenburgh Square. As part of our current instruction, we are also providing advice on the next logical phases of site investigation type procedures and commenting on any immediate investigation works potentially required to the localised areas of the courtyard space.

Please note that as part of our existing professional remit, we have not inspected any properties either internally or externally outside of the courtyard demise on all neighbouring sides.

#### 2.0 - Introduction

Mecklenburgh Square is a terrace of 24 houses forming the east side of Mecklenburgh Square in Bloomsbury, London. It is notable for the number of historic houses (in a conservation area) that face directly onto the local botanical gardens. Mecklenburgh Square and its associated properties are Grade 2\* Listed and were constructed in the early 1800's in a traditional Georgian style.

The properties exterior is a formal composition of 4 storeys, basements and additional rear elevation extensions. It is our understanding that the ground floor flat extension to the rear of 15 Mecklenburgh Square was constructed approximately 30 years ago. It is currently unclear as to when (and how) the rear/side extension at 16 Mecklenburgh Square was constructed, however it can be roughly assumed that it was built around the same time period.

#### 3.0 - Inspections Completed - Thursday 21st April 2022

Along with Goodenough College management and facility representatives from CBRE, a "non-intrusive" visual inspection was carried out within the courtyard area and ground floor flat extension to assess any potential damp issues in relation to the party wall separating the two properties.

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No access was unfortunately provided on the survey date to the basement flat at 16 Mecklenburgh Square to verify any existing claims from the Landlord of damp ingress to their rental property as a result of perceived deficiencies in external maintenance procedures and general construction elements at 15 Mecklenburgh Square.

The weather on the day of the survey was dry, overcast and relatively warm for the time of year. No access or specialist camera equipment was provided as part of the preliminary inspection and no thermal imaging type survey works have been completed so far as part of the overall instruction to date.

### 4.0 - Possible Damp Ingress: General External Courtyard Observations

The basement courtyard flank wall was visually inspected with random moisture readings taken across its solid (225mm thick) rendered masonry flank wall using a traditional surveyor's moisture meter. No early or obvious signs of damp were generally noted, however at the time of the inspection the weather in Central London had been dry for a prolonged period of time and this would generally yield a traditionally low damp reading using this particular type of surveying instrument. A few sporadic horizontal and vertical cracks were also noted across the render finish to the party wall at both high and low level and this could possibly be causing a dampness to ingress into the masonry structures behind and migrate through the wall. It also appears that a portion of the lower section of render has been either overlaid or laid slightly thicker than the rest of the wall and a clear "lip" can be noted at around 1.8m from the finished floor level of the courtyard patio, this overlay (or slightly thicker rendered part of the wall) might suggest historic issues which have been repaired in the past.

We also observed a 150mm high concrete plinth protecting the party wall at low level, these types of traditional plinth were historically constructed to protect masonry walls behind from rainwater "splashing" above any DPC systems during intense storms/heavy rainfall. Unfortunately, they can also sometimes encourage rising damp and especially so if the bricks used in the walls behind are somewhat porous. It is also currently unclear as to whether the plinth has been essentially constructed higher than any existing damp proofing arrangements and this warrants further investigation. Please also note that the cementitious concrete plinth might also be technically trapping general moisture in the party wall in addition to also being a rising "capillary action" type damp matter.

The potentially cementitious composition of the existing render finish might also mean that moisture in the form of rising damp, condensation etc is also being trapped in the party wall too. Along with protecting brick and strengthening the structure, render covering the walls of a building acts as a sort of raincoat helping to prevent any water from penetrating the surface. Unfortunately, deterioration due to age or damage means that inevitably the render will start to exhibit cracks and fractures that can lead to penetrating damp through the render. Even slight cracks in the render of a building can allow water to penetrate and become trapped between the render and brickwork. This build-up of stagnant moisture will eventually soak into the brickwork/masonry and can lead to penetrating damp within the internal wall. This can create an unsightly and harmful damp problem that will only deteriorate if not properly addressed.

Traditionally, a lime based breathable render and plinth system might have been installed to the party wall which was then possibly replaced at a later stage by the perceived cementitious systems, some low-level weeds were also observed as growing out from the plinth in a couple of locations along the wall and this might mean that moisture is trapped behind in the wall structure, allowing the vegetation to flourish.

The existing patio slab finish also appears to be "laid to fall" towards the party wall as opposed to being laid towards the existing rainwater gulley's in the corners of the courtyard, it would be prudent to carry out a levels survey of the patio to assess this further. The rainwater gullies in the corners of the courtyard also appeared to be generally blocked with leaves and other forms of debris and these should be cleaned out as a matter of good practice.

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Immediately juxta-positioned to the party wall is the ground floor flat bathroom extension (approximately 30 years old) including a bathroom (shower, sink, toilet) and dining area accommodation. It was noted on the day of the survey that the bathroom drainage and water feeds for sanitaryware generally appear to drop below the suspended (timber) sub-floor void of the extension and these may be potentially dripping/leaking into the floor void below and warrants investigation. The void below the bathroom also appears to be not "ventilated" correctly by a cross flow of fresh air and this is a concern from a party wall "sweating" point of view and mould growth/decay to any encapsulated party walls and the existing timbers (such as floor joists) used in the suspended flooring make-up.

To the rear of the site and on the far side of the extension bathroom, we also noted a row of terraced two storey houses with manicured gardens to the rear. It is practical to assume that water could essentially migrate through any abutment type walls to the Mecklenburgh square properties and filter into the basement flat walls and especially if the original tanking systems (likely to be a traditional sand/cement render finish) have degraded over time and failed. Please also note that high ground levels to the gardens of the terraced properties behind the extension are also likely to be contributing towards the perceived degradation issues within the concealed "unventilated" floor void in the ground floor flat extension.

#### 5.0 - Next Steps and Future Surveys (Advanced Investigations)

A secondary advanced phase of investigation/testing type work and a reporting procedure is required to further progress the understanding of the potential damp ingress to the party wall including:

- 1. Provision of a thermographic camera survey to assess any existing damp hidden in external walls, floor voids etc.
- 2. CCTV drainage survey (and plotting on floorplans) to assess the above and below ground conditions of the existing site drainage network including making an assessment of invert levels, direction of flow, anti-flooding arrangements (if any) and the general condition of buried pipework and inspection chambers.
- 3. Subject to any necessary "party wall" approval matters, careful removal of part of the low-level cement rainwater plinth and render finish above (in a targeted section) at a couple of locations should be undertaken (across the party wall) to assess the condition of the masonry wall structures behind and to review any existing damp proofing measures currently in place such as (slate, bitumen on injected) DPC's etc.
- 4. We would advise to arrange to test the cementitious rating of the existing low-level plinth and render finish above to see if this is potentially trapping moisture behind and within the 225mm solid brickwork "party wall" structure. It would also be useful to identify the masonry used in the party wall to check on its porosity.
- 5. Carry out a levels survey of the courtyard areas to check for gradient falls to the rainwater gullies.
- 6. Creation of a square (man sized) "access/inspection" type hole in the masonry wall (below the first-floor flat bathroom extension to flat 1 at 15 Mecklenburgh Square) to assess the condition of the sub-floor void, bathroom plumbing arrangements and the currently encapsulated "non-ventilated" party wall arrangement.
- 7. Writing letters to the adjoining owners on the far side of the courtyard (with high level gardens) to request access to conduct a proposed damp survey on their rear elevation garden walls

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8. We would also advise to write to the Landlord of the basement flat at 16 Mecklenburgh Square to ask for independent access to inspect the damp within their flat demise to gain a fuller more rational understanding of the current perceived damp problems along the party wall (and perhaps other locations).

9. It would be also advisable to remove any vegetation growing out of the plinth and to clean out the patio rainwater gullies as soon as practical. Any existing holes in the plinth/render finishes should in the short term be sealed with an appropriate form of pointing (cement fillet or silicone) to stop rainwater entering behind the existing finishes.

Please note that as the property is Grade 2\* Listed and as such, Listed Building Consent may need to be obtained from the Local Authority for the any investigation or opening up type works. We would also advise that a demolition and refurbishment investigative asbestos survey is also completed (if not available already) and handed to any Contractors working on the property given the overall age of the property and the extensions. Appropriate PPE (and perhaps RPE) will also be required to enter any voids and to generally conduct the investigation works.

#### 6.0 - Summary

Without seeing the basement flat at 16 Mecklenburgh Square in person, it is obviously very difficult to put forward a succinct report to fully verify the proposed cause of any water/damp ingress to the basement flat, but having dealt with many similar situations in the past, we are recommending that the further investigation works are completed as soon as possible to start to rule out the various traditional sources of moisture ingress/damp matters into historic properties.

Prior to the pending advanced investigation type surveys/works commencing, we would strongly recommend that the areas of concern as flagged in this report are continued to be monitored by site staff with any slight concerns immediately reported to the interested parties. We also recommend that any approvals for the advanced investigation procedures and any subsequent opening up and repair works are carried out without delay to avoid further enhanced repair costs.

For now, we trust the above initial report is satisfactory for your current purposes and we would be grateful for your comments in due course.

Yours sincerely,

Mark Reeve Bsc Hons, MRICS Carlile Associates

Appendix A: Floorplans (\*marked up) with Google Earth Photos