

22 - 25 ELY PLACE / ST ANDREWS HOUSE

London

Existing Boundary Wall
Essential Structural Repairs

Design & Access statement

SAH-AUK-ZZ-ZZ-RP-A-07003 P01 (2021.03.31)

1.1. Historical Importance

The historical importance of the adjacent buildings and the quality of the conserved structures noted. The site is located within the Hatton Garden Conservation Area, and the adjacent St Andrews House building is Grade II listed. Our client shares the aspirations of Camden and English Heritage and continues to preserve the integrity of the structures and their status.

1.2. Existing Conditions

The common boundary wall between the properties of Ely Place and St Andrews house has evidence of cracks and disrepair that have been found to be significant enough to warrant a more detailed structural investigation and remedy. In particular, the damage to the wall to the rear of 22 – 25 Ely Place is quite severe; to that end, a structural survey was commissioned, and the findings and recommendations are the basis of the proposed repairs.

The wall is exposed to the East, which faces St Andrews house. It is comprised of various brick constructions, most notably a buttressed element behind No 25 Ely Place that has the most signs damage. This is a rendered element, the brick buttresses are exposed brick. The remainder of the

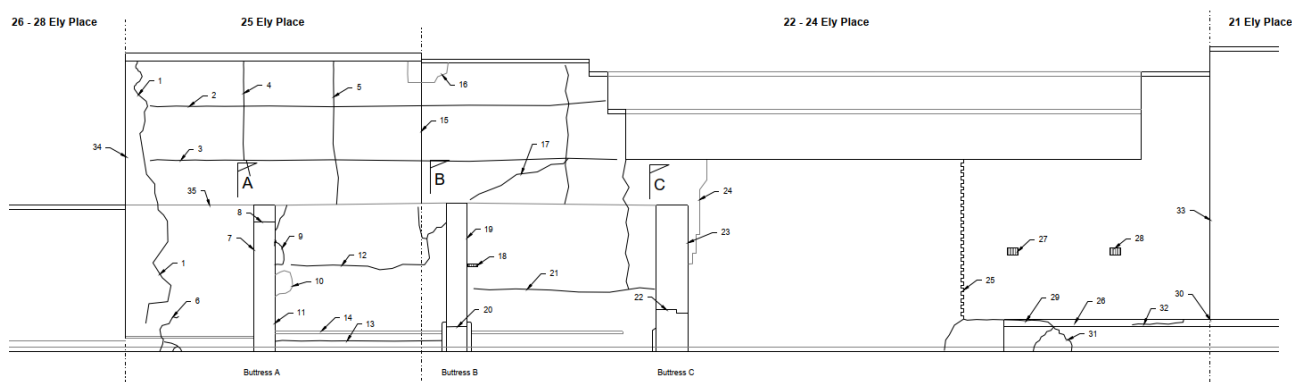


Fig.1, Boundary Wall, East Facing : Several Cracks are evident and the existing primary features need to be stabilised.



Fig.2, Buttress A : Cracking at the junction with the wall



Fig.3, Buttress B : Left Side View, large base crack



*Fig.4, **Top of Wall** : View onto No 25 & No 24 Ely Place Rear Wall top section illustrating previous remedial localised works*



*Fig.5, **Boundary Wall, East Facing** : View onto No 22-24 Ely Place Rear Wall top section including Buttresses B & C*



*Fig.6, **Buttress C** : Severe Cracking and separation*



*Fig.7, **22 Ely Place** : View of damage and wear at the bottom of the wall*

1.3. Requirements

In order to stabilise and preserve the wall, it is proposed to undertake structural repairs to do so, and which will require a mix of invasive and cosmetic works. Based on the visible evidence and assumption that the settlements of the buttress's bases have now ceased, the repair work to the buttresses could commence. This will involve cleaning and removing moss and loose mortar, bricking up and packing up the main cracks as well as filling up the vertical gaps between the buttresses and existing rear wall. Remedial work are likely to include installation of remedial ties to connect the buttresses into the rear wall. This could be done using proprietary Helifix stitching system or SockFix anchors and is described in 1.4 below in a little more detail.

1.4. Design proposal

In line with the Structural Engineers Recommendations, and as outlined in the supporting drawing **101682-SWH-EP-ZZ-DR-S-0100 P01** it is proposed to undertake the necessary structural repairs making use of established industry methods and good practice.

Some key invasive measures have been noted to date. Due to numerous cracking, warping, discolouration, and generally very poor condition of the existing render to No 24 and No 25 Ely Place we propose removing the render entirely in order to assess the cracking to the existing brickwork. A HeliBar system stitching system is then proposed for to any found cracks as well as new render laid on repaired and primed brickwork surface with use of mechanically fixed expanded metal lathing (E.M.L.).

New coping stones and pointing should be allowed for to reinstate weatherproofing to the existing rear wall.

We also propose that the existing plinth near No 22 and 21 Ely Place should also have the top render replaced after the cracks are stitched or rebuild to reinstate the weatherproofing.

Notwithstanding the above, the various cracks and damage will be undertaken using a combination of lime mortar repointing, resin injection and 'Helibar' repair methods, depending on the scale of the repair required :



Fig.8 HeliBar (Helifix) Crack Repair Stitching Products to Stabilise Cracked Masonry



Fig 9. Helifix Resin Crack Repair Stitching Products to Stabilise Cracked Masonry

1.5. Other Works

Any internal repairs to the adjacent buildings will be handled as separate applications where necessary.

1.6. Access

The proposals within this application do not have any effect on public access; the site is on a secure private estate.

Architects: **Aukett Swanke** (Mr David Smith)
10 Bonhill Street, London, EC2A
T +44(0)20 7843 3000 / +44(0)7738293767
E david.smith@aukettswake.com