ElliottWood

Site Visit Record

Project: 11 Cannon Lane Date: 30th September 2024

Main Contractor: Enbuild Construction

Architect: Serena Mignnatti and Darling Associates

Weather: Sunny

Photos Taken: Yes, refer to the report below

General Overview of the Wall Condition

The masonry wall, built as part of the Hampstead Parish prison, is showing signs of age and weathering. Despite its Grade II listed status, which signifies historical and architectural importance, the structure exhibits common wear and tear for its age, necessitating localised interventions to preserve its integrity and functionality.

The wall retains around one meter of soil from the garden behind it, and this pressure has contributed to some bowing along the structure. However, based on a visual inspection, the bowing does not indicate ongoing movement or imminent structural failure.

Observations

The wall is composed of traditional masonry, and while the core structure remains sound, there are several areas where the mortar joints have deteriorated. These sections will require localised repointing to maintain weather resistance and structural stability. The wall is supported by brick piers, which appear to be original to the structure. The piers are in satisfactory condition and continue to serve their intended function of providing additional support to the wall.

Defects and Recommendations

- Repointing: There are numerous areas along the wall where the mortar joints have become eroded or weathered over
 time. These should be repointed using a lime-based mortar that is consistent with the historical construction methods of
 the period. This will ensure both aesthetic and structural integrity while maintaining the listed building requirements.
- Crack Stitching: Some cracks have been observed in the masonry, potentially due to historical settlement or the pressure
 exerted by the soil behind the wall. While these cracks do not appear to indicate recent movement, crack stitching should
 be undertaken to stabilise these areas.
- 3. Bowing of the Wall: The wall exhibits bowing, likely caused by the pressure from the retained soil. However, upon inspection, there are no signs of recent or progressive movement. While immediate action may not be necessary in terms of major structural reinforcement, monitoring the wall over time is recommended to ensure that no further movement occurs. Should the wall show signs of increased movement or failure in future, more extensive interventions such as soil stabilisation or ground anchoring may be required. However, at this stage, no immediate action beyond crack stitching and repointing is necessary.

As the wall retains approximately one meter of soil, it plays a crucial role in maintaining the structural integrity of the garden space behind it. The existing brick piers assist in supporting the load, and their current condition is satisfactory.

4. Damp issues: Dealing with damp patches in a listed masonry wall requires careful attention to both preserving the historic fabric of the building and addressing the root cause of the damp. There are various reasons why damp parches appear such as: rising damp caused by moisture from the ground rising up through the walls, penetrating damp due to water entering the building through cracks or porous bricks, condensation damp caused by excess moisture in the air settling on cool surfaces and leaks caused by broken pipes. All of these will have different strategies to deal with. For rising damp a breathable damp-proof course (DPC) should be installed although this may not be possible in the listed building and should be checked with the conservation officer. Penetrating damp issues will be resolved by the repair of any external issues like damaged pointing and cracked masonry. For condensation the best strategy would be to improve ventilation to allow airflow.

Once the cause is addressed, allow the walls to dry out naturally. This may take time depending on the severity of the damp. To speed up the process, dehumidifiers can be used in winter but avoid the use of heaters for rapid drying to prevent damage to the masonry.

Ensure all repairs respect the historic character of the building.

Advice from a specialist should be sought to assess cause of damp.

Conclusion and Next Steps

The Grade II listed wall at Hampstead Parish is an important historical structure and, while showing signs of wear and age, remains in a generally stable condition. The key recommendations are as follows:

- 1. Localised repointing with lime mortar
- 2. Crack stitching to stabilise identified cracks
- 3. Continued monitoring of the bowing to ensure that no progressive movement occurs
- 4. Resolving damp issues in the entrance area.

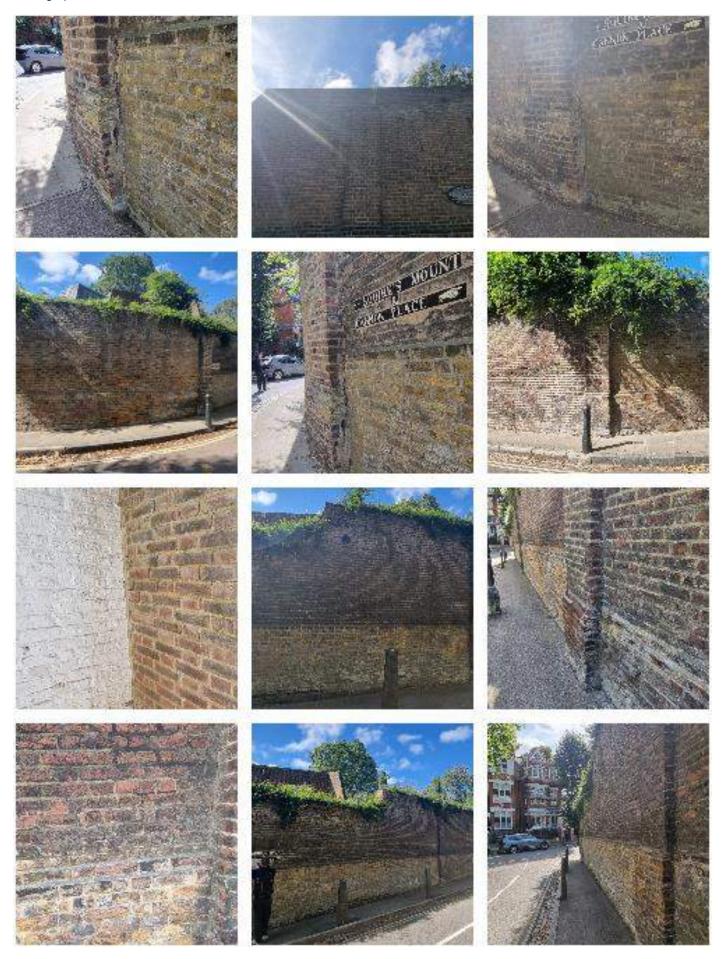
All repairs should be conducted using materials and methods that are sympathetic to the original construction to meet the requirements of its listed status.

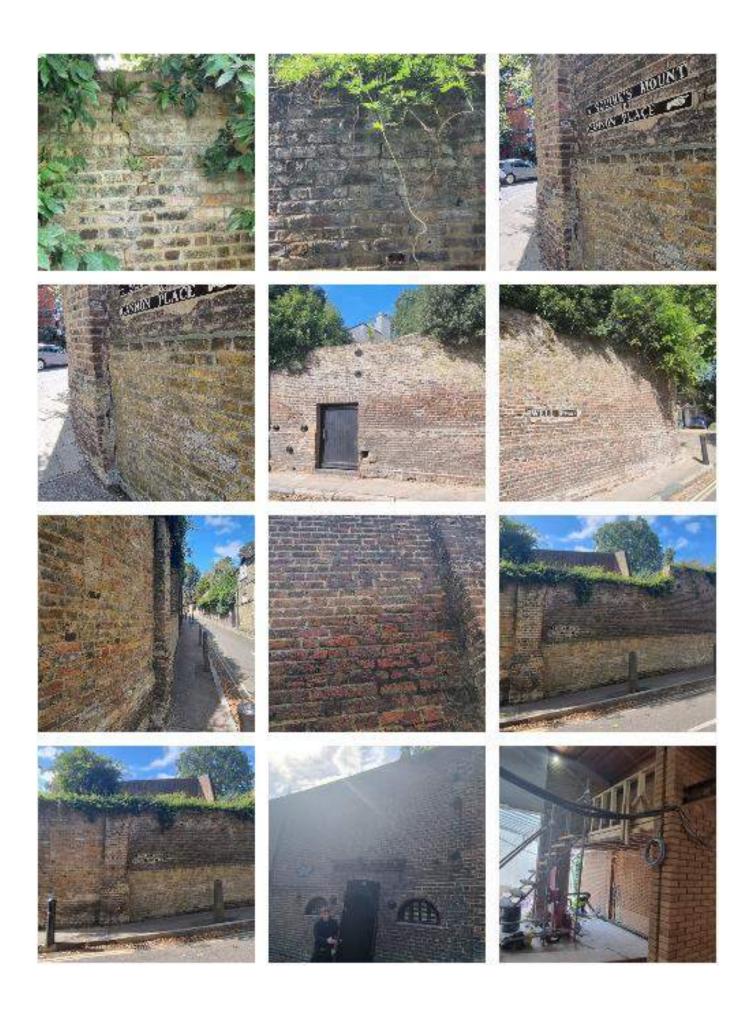
Given the historical significance of the wall, it is crucial that all interventions respect the wall's Grade II listed status. A contractor with experience in historical masonry should be engaged to perform the necessary repairs.

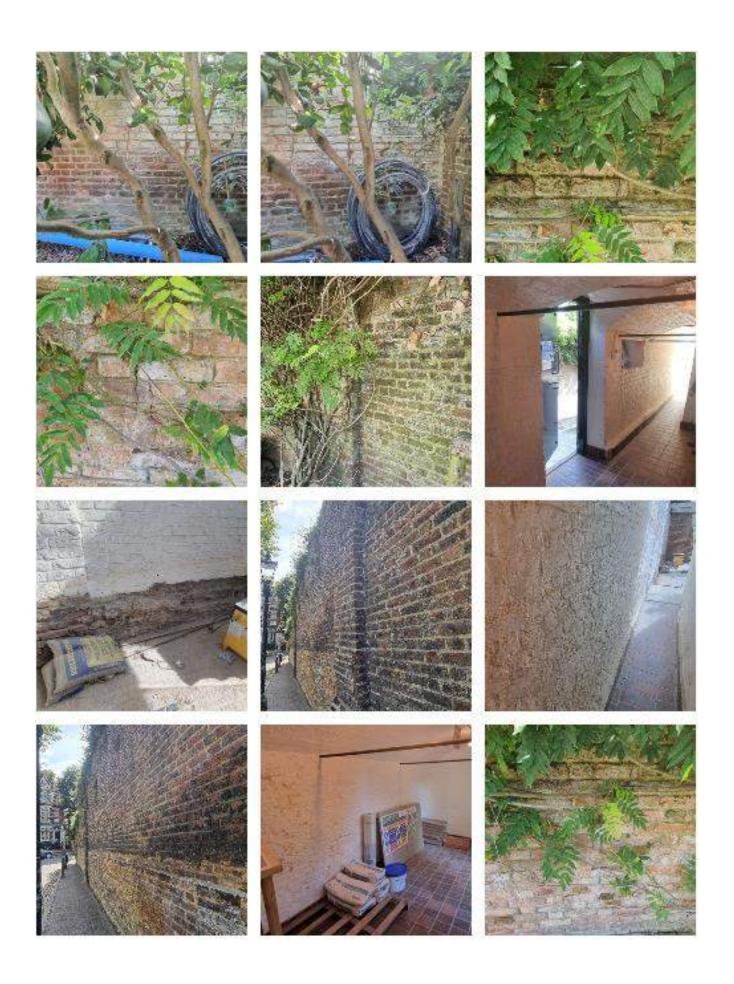
Regular maintenance, such as checking for further deterioration of mortar and ensuring that vegetation does not damage the structure, should be part of an ongoing conservation plan.

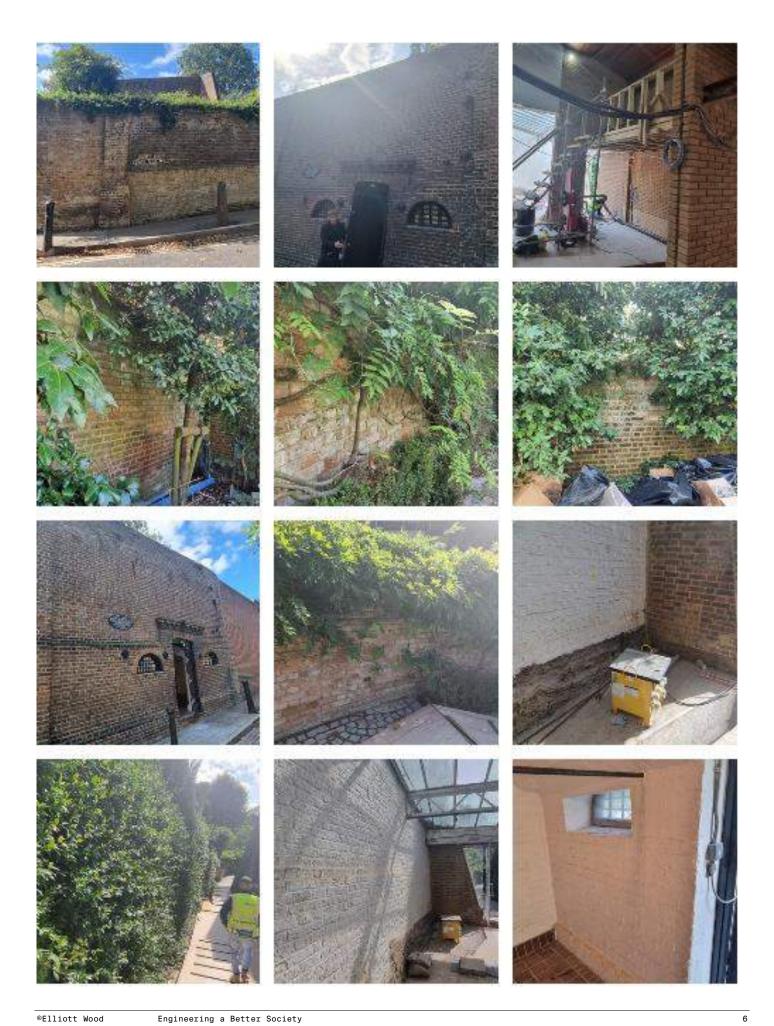
Distribution: Darling Associates Serena Mignnati

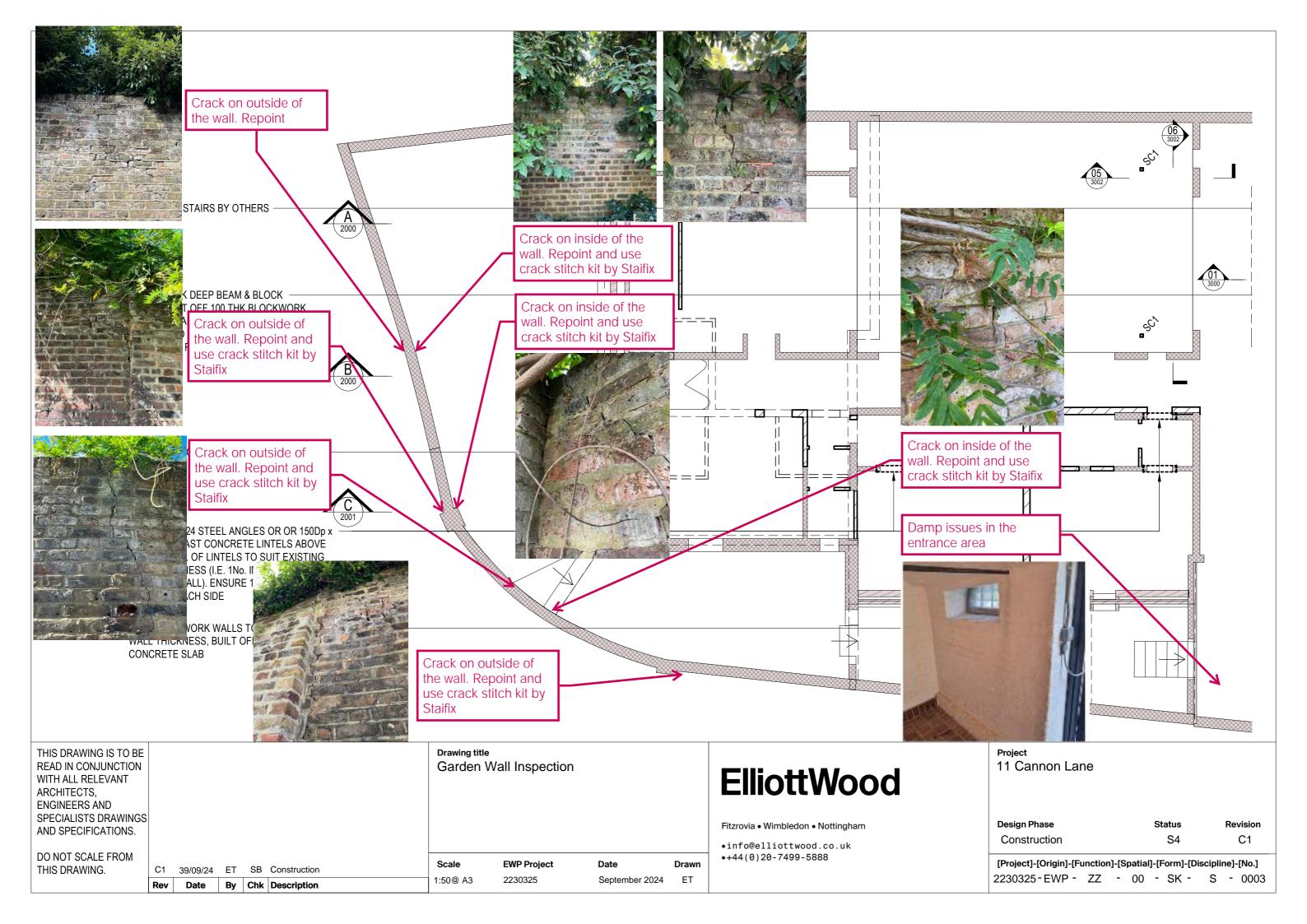
Photographs

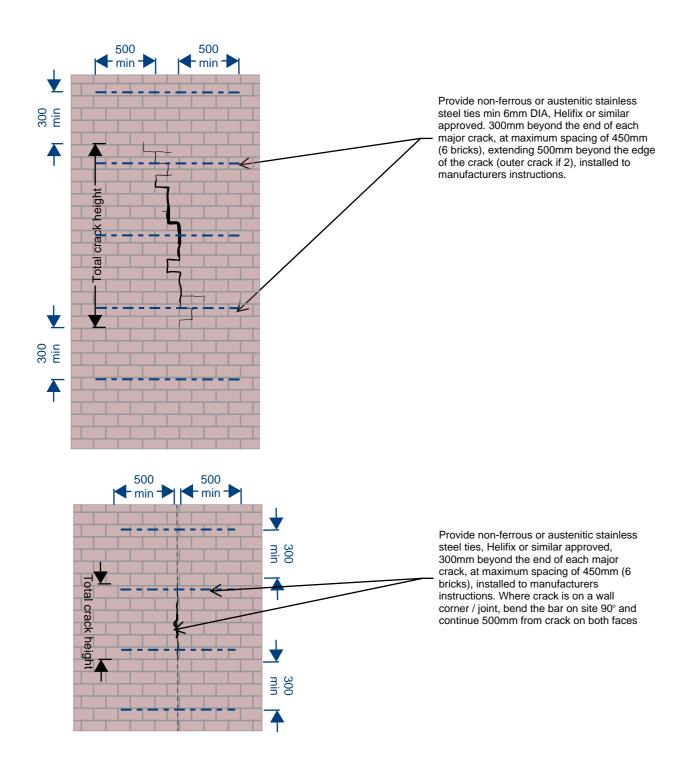












Masonry Repair Specification

Re-point Masonry and Re-render

Re-point masonry to BS 8221-2. Mortar mix to be non-hydraulic lime mortar to be compatible with existing masonry units and match the existing mortar characteristics and colour, Class B1 or better, to specialists specification to BS 890. Joints to be raked out, removing any loose mortar to between 38mm and 50mm, with non-mechanical tools. Joints to be cleaned and wetted before placement of new mortar. Clean surfaces as noted in Type 1.

Repair minor cracks in mortar and masonry

A crack in masonry is considered minor if it has a thickness of less than 5.0mm and an extent of less than 500mm. Remove finishes around cracking to determine thickness and extent. Any masonry units that are cracked are to be replaced, replacement brickwork should match the originals in material, size, colour, texture, density, hardness and porosity according to Section 9.2 and 9.3 of BS 8221-2. Cracks in mortar limited in extent to 500mm in both directions on the face of the masonry to be repaired by raking out and making good, as noted in Type 2. If existing mortar has disintegrated, or the crack penetrates, to a large depth, all loose mortar to be removed, replacement mortar should be deep tamped in layers according to 7.3.4 of BS 8221-2.

Stitch major cracks with non-ferrous ties

A crack in masonry is considered major if either the thickness is greater than 5.0mm or its extent is greater than 500mm. Remove finishes around cracking to determine thickness and extent. Insert non-ferrous or austenitic stainless steel ties as shown in detail 1 and according to manufacturers instructions. Mortar repair to match existing but in accordance with tie manufacturers instructions. Carry out general repairs elsewhere as Type 1, 2 and 3 as appropriate.

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Garden Wall Inspection - Crack Repair

EWP Project Scale Date Drawn 1:50@ A3 2230325 September 2024

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Design Phase	Status	Revision
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