The Morton Partnership

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CONDITION STATEMENT OF CORAM CAMPUS BOUNDARY WALL

Client: Coram Foundation
Coram Community Campus
49 Meckleborough Square
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Architect: Meadowcroft Griffin Architects
Studio 1A
Highgate Business Centre
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1.0 INTRODUCTION AND CLIENT'S BRIEF

1.1 As part of a Masterplan to develop Coram Campus, The Morton Partnership Ltd have been appointed to carry out an assessment of the condition of the boundary wall to the north of the site. The wall separates the Coram site and St Georges Gardens to the north.

1.2 The wall is grade 2 listed.

1.2.1 The purpose of the condition survey of the wall is to provide supporting evidence for a planning application for an adjacent building.

2.0 CONDITION SURVEY

2.1 General Condition

2.1.1 The wall is approximately 1.8m high along its length. Large brick piers are spaced at approximately 4.5m centres which are generally 660mm x 660mm and have a large stone coping. The wall is generally 330mm thick with a dogtooth course at shoulder level to the south facing elevation. Above the dogtooth course the wall reduces in thickness to a brick on edge capping (Photograph 1). The north facing elevation of the wall is generally flat with no change in elevation or thickness or decoration courses (Photograph 2).

2.1.2 The wall was found to be generally straight and plumb with only a few exceptions in local areas which are discussed later in the report. As one would expect to a wall of this age, there has been a number of repairs carried out and localised reconstruction along its length.

2.1.3 The wall has a number of typical defects along the majority of its length to both sides. These include the following:-

- General erosion and spalling of facing bricks.
- The pointing has fallen out or been washed away from the majority of the joints in the wall.
- Previous re-pointing has been carried out using cementitous mortar which has caused damage to the edges of the surrounding bricks when spalling has occurred.
- Many areas had vegetation growth within the wall which in its worst extremities was causing damage to the wall.
- A number of panels have been reconstructed using materials not matching the original construction.

The report will not highlight all of the above defects to each of the sections of wall as these defects were found to occur generally throughout the full length of the wall. The condition survey will report areas where more significant dilapidations have occurred.

2.1.4 There were a number of areas where full access was not possible due to the close proximity of buildings, grave markers and dense vegetation.

2.1.5 We have marked up elevations of the wall from each side and include these in appendix A. Please refer to these drawings for location references to wall piers and panels.

2.2 Survey of North side of wall

2.2.1 Pier A has moved considerably in the past and currently has missing bricks and a poorly re-constructed edge using different colour bricks (Photograph 3).

2.2.2 Pier B is not a typical full height square pier as per all of the other piers along the length of the wall. This pier is only found on the north side of the wall and the top of this pier is approximately 3 courses below the top of the wall. This pier has a number of missing bricks over its area (Photograph 4).

2.2.3 Wall panel 4 has an open horizontal joint in the course below the brick on edge course for the majority of the length of wall.

2.2.4 Wall panel 9 has a number of holes where bricks are missing. Vegetation is now growing in some of these holes causing further damage to the walls (Photograph 5).

2.2.5 The brick on edge capping to wall panel 12 is loose. This is likely due to water and vegetation ingress causing the mortar to be lost.

2.2.6 There is a vertical crack in pier M where visible access is available over a grave marker..

2.2.7 A number of bricks are loose and missing to pier N which was generally found to be in particularly poor condition (Photograph 6).

2.2.8 Wall panel 14 leans outward in the location of the return wall on the south side between the wall and the building. This has also caused some cracking locally to this wall (Photograph 7).

2.2.9 The top 2 or 3 courses of wall panel 16 lean inward and appear to be loose as opening up of the bed joint has occurred (Photograph 9).

2.2.10 A vertical crack in the brickwork to wall panel 18 has occurred in the location of the tree on the south side of the wall. This is a substantial tree and is in very close proximity (<1m) of the face of the wall. This wall panel has been reconstructed in the past and is not the original bricks but it has been constructed as a facsimile of the original wall (Photograph 8).

2.2.11 A number of bricks are missing to the left hand side of pier T.

2.2.12 A number of brick on edge cappings have become dislodged in wall reference 20. There is also a cut back tree stump very close to the wall (Photograph 10).

2.2.13 Wall panel 21 has been reconstructed using different bricks than the original and is in reasonable condition. There is a full height opening within this panel. The coursing does not line up between the newer wall panel and original pier and it is therefore unlikely that these elements are bonded in however it may be possible that proprietary wall starter have been used as little to no movement was noted between the two elements.

2.2.14 A number of brick on edge cappings have become dislodged in wall reference 23. There is also a vertical crack in this wall.

2.2.15 Wall panel 24 has been reconstructed and is in reasonable condition (Photograph 11). The bricks used are similar to panel 21 and would assume that this panel was constructed at the same time and therefore we would make the same assumption regarding the bonding between the pier and wall panel.

2.2.16 Access was limited between panels 26 to 30. Some minor defects were noted such as missing bricks in panel 29.

2.3 Survey of south side of wall

2.3.1 Wall panels 1 and 2 are rendered to the south side of the wall for the lower thicker section of wall. The render has fallen away in many areas and is live and has suffered significant cracking for much of the remaining areas. The top of this length of wall leans inward. The pier is not in evidence on this side of the wall but only occurs on the other side of the wall (Photograph 12).

2.3.2 Pier A has a stump from an old bush embedded with the brickwork which has caused the brickwork to crack and fall out (Photograph 13).

2.3.3 Access was limited to wall panel 3 but it could be seen that the render to the sloping flaunches was loose and appeared to be live (Photograph 14).

2.3.4 The wall to panels 5,6 and 7 was not fully accessible due to the wire mesh fence and frame enclosing the childrens playground. The frame has been fixed back to the wall via bolts/ anchors. A small vertical crack was recorded in panel 6 behind the wire mesh fence in the string course (Photograph 15).

2.3.5 There was no access to the south elevation of the wall between panel 8 and 14 due to the close proximity of the existing buildings and we therefore cannot comment on these areas.

2.3.6 Panel 15 has previously had a bush growing in the top courses of the wall but this has now been cut back but the root is still within the wall.

2.3.7 Pier reference P has a number of missing bricks to the base.

2.3.8 Wall panel 16 has a number of missing bricks to this elevation.

2.3.9 Pier R has a number of bricks missing to the pier base (Photograph 16).

2.3.10 Panel 18 has a vertical crack that can be seen to both sides of the wall. There is a substantial tree less than a metre from the wall where the roots have caused the wall to move. This wall has been reconstructed but the tree has still caused movement in the wall (Photographs 17 & 18).

2.3.11 The dogtooth course in panel 20 has significantly eroded as has a reasonable amount of wall panel below the dogtooth course. There is also a diagonal crack in this panel adjacent to pier U however this could be a junction where the reconstructed panel 21 and Pier U is bonded into the original brickwork of panel 20 (Photograph 19).

2.3.12 Pier X has a number of missing bricks adjacent to panel 23 (Photograph 20).

2.3.13 Panel 25 is in very close proximity to a large tree. This wall was considered to have suffered slightly worse than average erosion, particularly to the dog tooth course (Photograph 21). It was also noted that a number of bricks have been cut out and replaced, where erosion has been excessive.

2.3.14 Pier Z has a number of missing bricks to the base of the pier on the left hand side.

2.3.15 Pier AA has had poor reconstruction work to the base on each side (Photograph 22).

2.3.16 Pier AB has a number of bricks missing to the base of the pier on the left hand side.

2.3.17 There is a small hole where a number of bricks are missing in panel 28 just above ground level (Photograph 23).

2.3.18 Pier AC has a number of missing bricks at the base of the pier. This pier has also been repaired in the past, however the repair comprises of poor quality stitching in of bricks.

2.3.19 Panel 30 and part of panel 29 are rendered. The render has cracked in a number of areas and appears to be live in some areas (Photograph 24).

3.0 Brief Summary & Recommendations

3.1 The wall was generally found not to have suffered from significant structural movement. The majority of the wall was found to be reasonably vertical and plumb with no significant undulations over its length.

3.2 The majority of defects noted to the wall were associated with general deterioration of a wall of this construction and age. Erosion and spalling of brickwork is common to nearly the full length of the wall. Vegetation and moss growth was also found to be in existence for nearly the full length of the wall.

3.3 The majority of pointing to the wall has been lost. This has allowed some bricks to have fallen out and others to become loose. In other areas historic re-pointing has been carried out but using a cementitous pointing which over time causes more damage to the adjacent bricks due to frost damage.

3.4 As a schedule of minimum requirements carried out to the wall prior to the development works commencing we would recommend the following. All areas of missing bricks should be carefully stitched in by competent bricklayers fully trained in conservation works. Replacement bricks should match existing in size and colour and the mortar is to match the existing where a good example exists. We would expect that the local authority will want to see a sample of this work prior to full scale works commencing. The bricklayers should also inspect the full length of the wall where accessible and check for loose bricks, particularly the brick on edge copings. All loose bricks are to be carefully removed and if possible, re-used in the reconstruction of the loose areas of brickwork. As with infilling of missing bricks, a sample should be provided to ensure that any new work matches the existing and that quality can be agreed. We would also recommend that the render is removed from the south elevation to panels 1 and 2 and also 29 and 30.

3.5 We would also recommend that all vegetation is stripped from the walls to enable a full inspection of the wall as should the gravemarkers that are resting against the north side of the wall.

3.6 We do not think it necessary to carry out repairs such as general re-pointing and replacement of spalled brickwork just yet but the client should consider these works when the development has been completed.

4.0 Suggested Protection During Adjacent Works

4.1 It is proposed to demolish the adjacent building and redevelop part of the Coram site. In some areas the adjacent buildings are in very close proximity to the wall. We would suggest that all demolitions carried out within 3m of the wall are carried out by hand down to foundation level. The foundations of all adjacent structures that are to be demolished are to be carefully investigated and in no circumstances is the foundation to the boundary wall to be undermined during demolition works. The contractor is to provide a fully detailed method statement prior to commencement of works. The works should be sequenced in such a way that no length of boundary wall is left with exposed foundations for any prolonged period of time.

4.2 To protect the wall during the reconstruction works we would suggest that it is enveloped in scaffold with a corrugated metal sheet or ply protective cover. The scaffold is to be erected up and over the wall where the vertical standards are to be 300mm away from the face of the wall.

5.0 LIMITATIONS

5.1 It should be stated that we have not inspected elements of load bearing structure unless specifically detailed in the report, which are covered, unexposed or inaccessible and we are therefore unable to report that any such part of the property is free from defect. Similarly we have not carried out any inspections of services, drainage etc.

5.2 This report has been carried out to the Client's requirements and no liability is intended or will be accepted from any third party whatsoever. The limits of liability are restricted to the contents of this report. No opening up or investigation of foundations etc was carried out, the inspection being visual only. No checks on load bearing capabilities have been carried out.

Appendix A

Wall Elevations

Appendix B

Photographs

Photograph 1: Typical elevation of south elevation showing piers and dog tooth course

Photograph 2: Typical elevation of north elevation

Photograph 3: Pier A showing poor quality local reconstruction and missing bricks

Photograph 4: Pier B not full height with missing bricks

Photograph 5: Wall panel 9 with missing bricks and vegetation growing in holes

Photograph 6: Pier N in particularly poor condition

Photograph 7: Wall panel 14 leans toward garden in location of return wall on other side

Photograph 8: Vertical crack in panel 18 in location of tree. Panel has been reconstructed

Photograph 9: Wall panel 16 showing horizontal movement in top courses

Photograph 10: Wall panel 20 with loose brick on edge course and close proximity of cut back tree.

Photograph 11: Reconstructed wall panel 24

Photograph 12: South elevation of wall panel 1 & 2 showing failing render

Photograph 13: Pier A showing cracking and cut back stump embedded in wall

Photograph 14: Wall panel 3 showing failing render

Photograph 15: Panel 6 with wire fencing attached to wall

Photograph 16: Missing bricks to base of Pier R and general condition of Wall 17

Photograph 17: Large tree in close proximity to Wall 18 which has a vertical crack. Missing bricks also in base of Pier R.

Photograph 18: Vertical crack in Wall 18 and missing coping brick on edge

Photograph 19: Wall panel 20 with eroded dog tooth course and diagonal crack adjacent to Pier U

Photograph 20: Missing bricks to Pier X

Photograph 21: Wall panel 25 general condition

Photograph 22: Pier AA with poorly stitched in brick repairs

Photograph 23: Wall panel 28 showing missing bricks in panel and adjacent Piers

Photograph 24: Cracking render to Wall panels 29 and 30

Appendix C

Addendum Report