

PROPOSED WORKS : **Conversion of existing property into 3 x No. self-contained apartments.**

ADDRESS : **23 Mead Lane, Bognor Regis, PO22 8AP.**

Garage Infill Wall

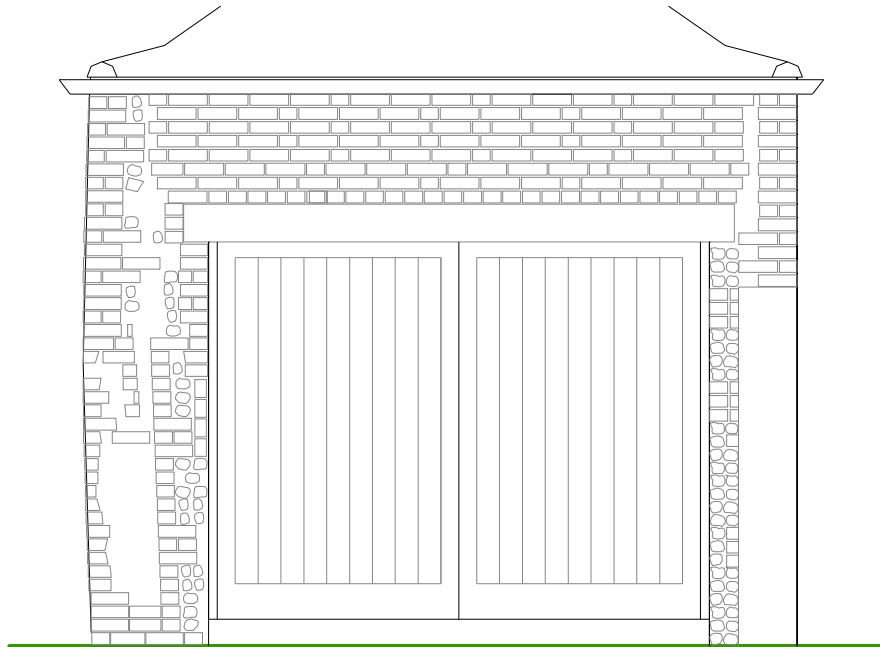
1.0 Introduction

- 1.1 The current garage structure has been historically stabilised with remedial restraint ties and plates in an attempt to prevent further roof spread and movement of the external walls.
- 1.2 The existing roof was to be strengthened with additional ceiling ties to further stabilise the structure where movement has taken place, all in accordance with the structural engineers design and calculations.



Photo – Existing garage wall elevation.

- 1.3 Since the original report the internal space and structure of the garage has been cleared out and fully exposed, the situation regarding the state of repair of the rear facing garage wall and in turn the lateral stability of the flint wall facing Mead Lane has been found to be more critical than originally thought.
- 1.4 The site was inspected by Mr Jim Henn of Arun Building Control recently where he raised concerns and asked for further investigation following the exposure of the structure.
- 1.5 The structural engineer visited the site and called for more extensive remedial work, not only to ensure the stability of the infill portion of the wall but also the long-term stability of the existing flank wall which has also moved over the years.



PARTIAL EXISTING NORTHERN ELEVATION

- 1.6 The engineer has stated *“The pre-existing movement to the existing brick quoin to the north east corner is such that it will not be possible to bond new brickwork to it whilst maintaining the correct lines and levels for the north elevation masonry. In addition, from our recent inspection, it is not considered possible to bond any new brickwork to the already deformed existing masonry on the north elevation and which includes the infill brick and flintwork. Any attempt at doing so will destabilise the wall and corner of the building further. In addition, the masonry over the garage door has moved and is unlikely to be able to be safely supported in the temporary condition without risk of partial or total collapse.”*
- 1.7 He further states that *“In order to safeguard the longer term stability of the garage structure and to extend its longevity for the foreseeable future we strongly recommend that the existing brick quoin to the north*

east corner of the garage structure is rebuilt in its entirety, returning this along the north elevation and replacing poorly formed and structurally unsound flint and brick infill. The masonry over the garage doors should also be rebuilt in order to provide a robust and stable structural arrangement. The existing flint and brick elements cannot be retained as to do so will leave the structure in an inadequate structural condition and at risk of potential further movement or collapse. The rebuilding and remedial work could be achieved by reusing some existing materials or similar reclaimed materials."

- 1.8 To summarise he says that *"Without undertaking the works recommended above the stability of the north and east elevations of the structure will be compromised possibly resulting in further movement and even partial collapse. Undertaking the recommended works as part of the proposed conversion work will, in our considered opinion, provide a robust structural form which should not require further repair in the medium term future, thus securing that part of the building for the future and maintain the built heritage of the rest of the structure without need for more significant remedial work"*
- 1.9 A copy of his report is included within this Discharge of Conditions application.
- 1.10 The existing wall is a mixture of brick-built corners and haphazard bonding face brickwork with some unbonded infill flint walling and heavy mortar repair joints in no real distinct pattern. The only discernable pattern of brickwork is above the garage door which is best described as 'Sussex' Bond or 'Flemish Garden Wall' bond.



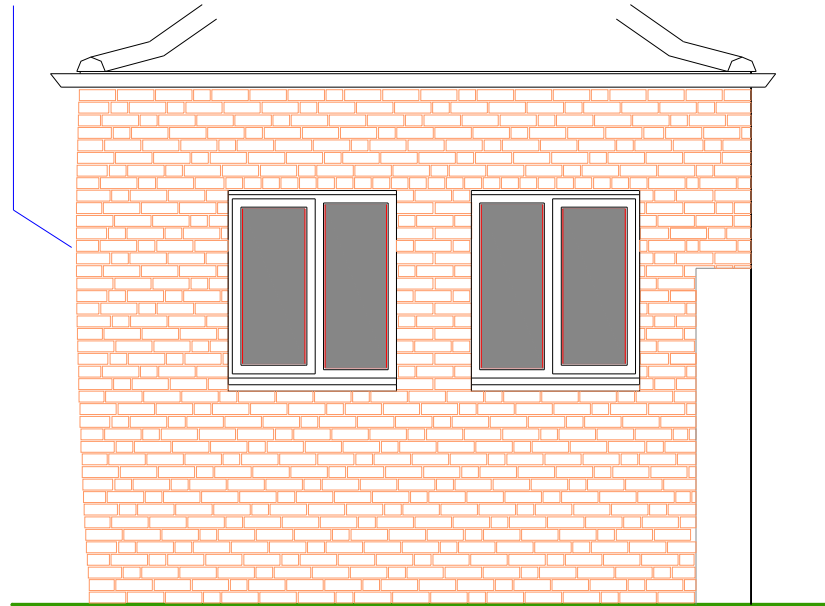
Picture – Example of 'Sussex' or 'Flemish Garden Wall' bond brickwork.

- 1.11 The 'Sussex' bond arrangement uses three stretchers between each header which is then repeated along each course, it has traditionally been used for garden walls and the like where speed of erection is needed in long sections of work. Normally the arrangement involves the header being sited above the midpoint of the three stretchers of the

course below, however, in this wall the header sits more above the first stretcher below giving a diagonal type pattern of headers across the face.

- 1.12 The proposal is therefore to re-build this portion of the wall in its entirety to safeguard the long-term stability of the structure and provide a more robust form which will reduce the need for medium term repair which it would otherwise need.

The replacement wall is to be built with the same bow and lean as existing to be able to tie in the flint walling to the flank wall.



PARTIAL PROPOSED NORTHERN ELEVATION

- 1.13 The new brickwork bonding pattern chosen is to match the existing style evident above the garage door with a 'Sussex' bond using wherever possible reclaimed bricks from this and other parts of the building. Pointing is to be flush type, cement:sand mortar, again to match with existing.
- 1.14 As will be seen with the submitted elevation, the lean and bow of the wall will be replicated and built in to the new design, not only to keep the character of the structure but also to allow for the smooth bonding of the flintwork flank wall facing Mead Lane.
- 1.15 Lintols above the new windows will be IG or CATNIC type which are not visible externally.
- 1.16 It is hoped that not only will this secure the long term stability of the building but it will also present an appearance that has kept the essence of the renovated wall which is in-keeping with the main structure and surrounding buildings within the Hotham Park Conservation Area.

Revision B – 13 May 2021