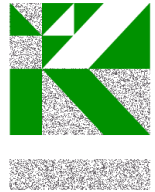


Date: 8 August 2024

Our ref: TWy/ATB/640324

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By email: Rachael.Mcmurray@havant.gov.uk

Dear Ms McMurray

LANGSTONE LODGE, 1 LANGSTONE HIGH STREET, HAVANT, HAMPSHIRE, PO9 1RY – SITE VISIT REPORT

Further to our fee quotation of 12 June 2024, vkhp visited the above property on Friday 2 August 2024 in clear and dry weather conditions. In attendance were the client's gardener and Tina Pickup of Havant Borough Council.

Prior to the site visit vkhp reviewed documents associated with planning application reference APP/24/00121, including existing and proposed general arrangement and elevation drawings, a report on the existing structure from Hockley & Dawson Consulting Engineers, reference 21720 R1 C dated October 2023, and a site inspection report, reference 24/2837/GEN by Colin Adams of Havant Borough Council.

The purpose of vkhp's site visit and subsequent review is to ascertain a second opinion on the recommendations from Hockley & Dawson on the demolition of the existing building due to its current condition.

The observations made during our site visit, descriptions of typical defects, recommendations for local repairs and our overall opinion on the condition of the existing structure are outlined below.

External Elevations

Portions of the south and west facing elevations have been rendered in the last two years (as informed by the client's gardener and noted within the Hockley & Dawson report), we understand that there were masonry repairs conducted as part of this re-rendering including crack stitching. Generally the render appears to be in good condition with no signs of structural movement to the vast majority of the rendered elevations. Minor cracking was noted to the southerly bay window on the piers, and this is to be expected on slender areas of render.

The northerly bay window had a significant impact mark with areas of crumbled render and portions of the render loose. The central and northerly window in these positions had been pushed in at their lower levels due to the impact. It is thought that the impact has been caused by an excavator or similar construction vehicle during the removal of the patio in this area. Internally, minor local cracking to the brickwork below the bay was identified. This defect has been caused by a vehicle impact and the repairs will likely include the re-building of some brickwork to the bay windows and re-rendering the external elevation.

The French doors to the living room on the south west elevation had been pushed in to its bottom left hand corner. A further inspection identified movement of the stone cill and an impact location on the cill. It is likely that, similar to the northerly bay window, the cill has been impacted by an excavator or similar construction vehicle during the removal of the patio in this area. Brickwork beneath the cill on the inside had also been displaced. This defect is not considered to be structurally significant, but the cill and internal brickwork may require relocation and repair.

A single horizontal crack was noted within the render on the north west elevation at second floor level, running from eaves level of the adjacent roof through to the western corner of this elevation. The crack is

minor and no bowing or distortion of the wall could be identified. A mirrored crack internally could not be identified but may be hidden by the second floor structure. Without further investigation it is not possible to determine what repair, if any, is required for this cracking.

Portions of the existing building have been removed to the north east elevation revealing some areas of brickwork in poor condition, including the living room and WC walls that have previously been internal. The defects to the brickwork here include minor cracking, horizontal displacement of brickwork at eaves level and previous timber lintels integrated into the brickwork. These defects are minor and are to be expected with buildings that have been extended several times. Repairs in this area are likely to include the rebuilding of local brickwork, removal of integrated timber elements, crack stitching, etc.

The gable wall to the previous kitchen on the north east elevation includes a number of defects. A steel beam has been installed at first floor level to create an opening between the previous kitchen and dining room. This steel is suffering from minor corrosion and the masonry bearings appear to be inadequate. The southern bearing is a mixture of dense concrete blockwork and original brickwork, with the northern bearing disguised by previous plasterboard. The brickwork directly over this beam appears to be cracked in several places, likely due to deflection of the beam. It is likely that this beam will require replacement with a steel gable post frame (one beam and two steel posts) with new underpinned foundations. It is also likely that masonry repairs and areas of brickwork will require rebuilding locally.

At high level the north east gable wall above the opening appears to be bowing slightly with various cracks visible. In some locations these cracks have been re-pointed. It is likely that the bowing and cracks to this elevation have been caused by a lack of lateral restraint and the modifications to the roof structure as noted below. Repairs to this area are likely to include stitching of masonry and tying between the masonry wall and floor and roof structures. Local areas of masonry may require re-building and new wall ties may be required to remaining brickwork.

Bowing to the roof level dwarf walls was visible externally to the south east elevation but no cracks could be identified from ground level. Repairs for these defects are noted below.

As identified within the Hockley & Dawson report portions of the external masonry walls are formed in cavity construction. Where we were able to view wall ties they appeared to be in serviceable condition. If defective wall ties are located, remedial ties could be installed to provide additional restraint between brickwork leaves.

Internal Masonry Walls

Generally, the internal masonry walls appeared to be in good condition with some penetrations created for services that may require local rebuilding or infilling. Within the entrance hall a concrete lintel is visible to a low level slot with an adjacent secondary opening. Whilst both of these openings likely reduce the capacity of the wall, the infill of these areas is a simple and effective repair.

Within the living room a shallow archway over the fireplace is suffering from minor cracking. This is likely due to the slenderness of the archway. Repairs to this area will likely include stitching or rebuilding locally of the archway.

Timber Elements

Internally the timber floor joists were exposed at all levels. Typically the floor joists appeared to be in good condition. In some areas floor joists have been notched for services which will require local replacement or strengthening.

The four timber beams located at first floor level over the ground floor family room and study providing support to the first floor walls over the bay windows have been propped due to portions of these elements suffering from rot and woodworm. It is apparent that the flat roof areas to the bay windows on the south west elevation have suffered from water ingress leading to issues with both the four beams mentioned and the roof joists over the bay windows. The surrounding internal floor joists appear to be in good condition. Works in this area likely include the replacement of these beams with either new timber members or steel elements as well as the replacement of the bay window roof joists and waterproofing.

Roof Structure

Issues identified with the north east elevation are visible internally and have likely been partially caused by the removal of portions of the dwarf walls and internal return walls. Similar to the external defects, it is likely that the infill of the removed dwarf walls, the proposed steel frame by Hockley and Dawson and crack stitching will be required.

Generally, the timber to the roof structure appeared to be in good condition with a variety of structural arrangements. To the southern corner where a previous ensuite had been located, some modern modifications had been undertaken, removing parts of the original roof structure. These do not appear to be structurally adequate and will require new support as part of the Hockley and Dawson proposed steel frame.

Due to the high collar location the roof has spread as is common in structures of this type and age. The dwarf walls have therefore experienced a lateral force at their top, pushing them outwards as seen externally. There are also a number of horizontal cracks in the dwarf walls indicative of this movement.

Within the Hockley & Dawson report a viable steel frame solution has been presented to provide vertical support to the roof structure. This scheme will likely prevent any further horizontal movement of the dwarf walls and provide ample opportunities for restraint to the damaged masonry throughout the roof structure. Whilst we have only reviewed this scheme in brief, it appears to be an adequate solution.

Conclusion

Whilst there are a number of locations where structural defects could be identified, the majority of the structure appeared to be in good condition with no signs of foundation movement or significant instability of the structure as a whole.

The re-use of the building will require a new steel frame or similar alternative solution to re-support the roof structure, crack stitching, rebuilding of local areas of masonry, a new steel frame to the north east elevation and replacement of some timber elements internally among other repair works. A series of temporary works structures will be required to safely complete these works, but we anticipate that the design and execution of these works is not beyond the ability of a competent temporary works designer and general contractor.

It is the opinion of vkhp that the sum of these defects and subsequent repair works does not warrant the demolition of this structure.

Photographs of the defects identified within this letter can be provided upon request.

Yours sincerely



BEng (Hons) CEng MStructE
Associate Director