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CHIMNEY RE-BUILD : RIVER HOUSE, CHURCH HILL, KERSEY, SUFFOLK HERITAGE PLANNING DESIGN & ACCESS STATEMENT

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Issue 1

1.0 Introduction

Works have been approved under DC/21/01606 and DC/21/01607/LBC and these are progressing on site. Under the approvals was permission to undertake repairs to the chimney. In doing so scaffolding was erected and the condition of the chimney assessed at high level. This has resulted in the discovery that the chimney was far more unstable than anticipated and as a result this application is for the re-build of the central chimney stack.

2.0 Setting & Context



River House is situated on the eastern side of Church Hill in the village of Kersey. The house is at the foot of the hill and its northern façade flanks the stream that passes across the road.

The house sits within the village street scene and alongside the 4 bedroom house, provides a 2 storey malting's building connected to the rear of the house, along with a further 2 barns one with open cart lodge, garage buildings, stables and a former pottery.

To the east of the site is open countryside and to the west private gardens across the road.

3.0 Existing Building & Site

River House Kersey, is a 4 bedroom grade 2* listed property, with origins dating back to a C16th jettied timber framed house. The grade 2* status can be attributed to 2 key features: The Tudor brick porch on the properties western elevation and a series of full size Elizabethan wall paintings which are now rendered over but situated on the external south elevation.

KERSEY CHURCH HILL 1. 5377 (east side) River House TM 0044 58/432 23.1.58 II* GV 2. A C15, C16 and later timber framed and plastered building formerly a house of some importance. Roof tiled. Built on an L shaped plan with wings to the south and west and an addition on the south end. Part of the front is faced in red brick. 2 storeys. A fine C16 two storeyed red brick porch projects on the centre of the front, with panelled pilasters and a rounded gable all surmounted by small pinnacles. In the gable there is a modern panel inscribed "Ye olde River House 1490". The upper storey has an original 3-light brick mullioned window surmounted by a moulded pediment. A moulded brick band divides the storeys. The ground storey arched entrance way is also surmounted by a moulded brick pediment. The porch is flanked by C18 double-hung sashes with glazing bars. The addition on the south end is probably of C16 or C17 origin but altered in the late C18. 2 window range of double- hung sashes with glazing bars. Roof slate, with a C17 chimney stack with grouped diagonal shafts. The south end, formerly an interior wall, has wall paintings of full size figures in C17 costtnae and ornamentation. (Now encased in glass).

To the rear of the property extends a C16th century timber frame 2 storey malting's structure. This structure has been extended to the south with a mid C19th lean-to.

The Listed building description for the property, taken from <u>https://historicengland.org.uk/listing/the-list/list-entry/1234780</u> reads as follows:

Some details of this listing description are now inaccurate. In particular, the wall paintings are no longer encased in glass and are not visible.

Included with this application is a Heritage Asset Assessment prepared by Mr L Alston MA (Oxon) which covers the social and architectural history of the property. The assessment includes a full set of map regressions, historical analysis and evolution of the house, along with description and photographic record, as such this section of this statement is kept brief. For a brief introduction through the summary from this report is on the following page:

"River House is a nationally important grade II*-listed building that makes a major contribution to one of the most picturesque scenes in Britain. This starred listing relates to its exceptional Tudor brick porch, which has escaped the usual over-restoration, and a rare wall painting depicting life-sized figures in Elizabethan dress that was formerly exposed on its right-hand gable (but has since been hidden by render). The interior preserves many more historic features, including a fine suite of panelling bearing the initials of the wealthy Cooke family of clothiers who owned the property in the late-16th and early-17th centuries. Until the beginning of the 20th century the site was known as the Brick House or Brickhouse Farm, and the survival of an early-16th century timberframed barn to the rear proves it was both a farmhouse and a merchant's house from the outset. A survey of Kersey in 1586 notes that Edmund Cooke lived in a house composed of two or more cottages, and this is borne out by the oldest part of the building to the left of the facade which originated as a complete dwelling of just 36 feet in length. This early-16th century structure was jettied along its entire frontage and contained a central hall with a pair of service rooms to the left and a small parlour of only 6 feet in length on the right. The house was doubled in size during the late-16th century when the hall and parlour were combined and the adjoining building to the right was replaced by a chimney stack and a new jettied parlour with a first-floor 'closet' or dressing room containing the wall paintings. The original jettied rear service wing, which contained a kitchen and a brew-house or dye-house, was extended at much the same time to create what may have been a rare workshop or showroom with glazed windows and brick nogging. This rear range was converted into a maltings in the 18th century and retains much of its industrial character."

Alston, L. (2018). River House, Church Hill, Kersey, Suffolk Heritage Asset Assessment



Principal North Elevation



Principal East Elevation



Principal South Elevation



Principal West Elevation

4.0 Proposals

Works have been approved under DC/21/01606 and DC/21/01607/LBC and these are progressing on site. Under the approvals was permission to undertake repairs to the chimney. In doing so scaffolding was erected and the condition of the chimney assessed at high level. This has resulted in the discovery that the chimney was far more unstable than anticipated and as a result this application is for the re-build of the central chimney stack.

4.1 Justification & Mitigation

In the original HAA undertaken by Leigh Alston the following reference was made to the central chimney stack

"The abnormal height of its contemporary 'concertina' chimney is explained by the reconstruction of the roof at a lower height in the 19th century; the original roof would have matched the pitch of the earlier roof, hiding the cement rendered lower section of the stack. The curious pyramidal cap appears to be a 19th century addition."

On drawings 148 and 149, levels A-C of the chimney are shown. These levels are detailed as follows and referenced below.

- A Base of Chimney Stack
- B 4 Diamond Stack
- C Pyramid Capping

The works to Section A are approved under DC/21/01606 and DC/21/01607/LBC and the works comprise

Central chimney stack render repairs: Remove an aggregate total of 1.5 m² of failing render on the four sides of the lower section of the stack.

Clean down the brickwork and re-render in 3 coat render; first and second coat to be 2:5:10% (lime putty: sharp sand: brick powder) and third coat to be 2:6:10%% (lime putty: sharp sand: brick powder).

Repair works to Section B were approved under DC/21/01606 and DC/21/01607/LBC comprising of

Allow to cut out and replace provisionally 15 no. bricks in soft red bricks bedded and pointed in 1:3 (lime putty: coarse sand with added grit). Bricks to be handmade supplied by Bulmer Brick & Tile Ltd.

Rake out and re-point provisionally 1.5m² of brickwork to the chimney in 1:3 (lime putty: coarse sand with added grit). Include for carefully cutting out previous cement-based mortar repairs – sample areas of cutting out are to be undertaken with the architect present to determine to the strength of the mortar. A final decision on the final extent of cutting out will be made following this inspection.

To Section C under DC/21/01606 and DC/21/01607/LBC the following work was approved

Dismantle the top 4 courses and reconstruct using the salvaged bricks made up with handmade soft red bricks from Bulmer Brick and Tile Ltd. Bed and point in 1:3 (NHL 3.5: coarse sand with added grit).

Reinstate flaunching to top of stacks in 1:2.5 (NHL5: coarse sand) mortar.

The works to Section A has been undertaken and no further work here is required or requested.

The works to Section B and C are proposed to be changed as follows:

The chimney was capped in the C19th or possibly C20th century with a brick 'ring beam' of 8 courses, this includes iron strapping running around the perimeter of the base of the 'ringbeam.' Much of this metalwork has now rusted. We believe this was introduced to stabilise an already leaning stack and is now exacerbating the problem. However the lean and lower cracking in the brickwork is not insignificant on its own. The majority of the stack is pointed in cement mortar although in places there is evidence of lime mortar both on the face and behind the re-pointing. The cracking through the brickwork is most evident on the photo titled mid north elevation. Internally the whiff walls have collapsed leaving no lateral restraint within the chimney and although the concertina form does help 'lock' the bricks together this is not as robust as it may appear.

A structural appraisal was undertaken by Nigel Wilson of AFP and the following comments and options were presented.

This leans towards the rear roof by an estimated 130mm above the ridge line from the position the rectangular plan form changes to the "saw tooth" arrangement. There are many cracked bricks within the upper section as a result of the age, wide temperature variations and the slim brick profile. We have looked at these and consider the arrangement to be unsatisfactory structurally, although it has clearly been in this condition for a number of years.

There are three options for the chimney:

- The first is to rebuild the upper, "saw tooth" arrangement, including two internal walls (Whiffs).
- The second is to try to install some sturdy alloy anchor ties (e.g. Cintec) to connect through to the chimney. This doesn't improve the potential instability caused by the lean.
- The third option is to carefully remove the internal steel ties within the top section.

The rebuilding option is the recommended option.

Whilst three options were presented it was determined that the only viable alternative was to dismantle and carefully reassemble the chimney, without the pyramid structure (section C) to the top.

In respect of the bricks for the re-build Bulmer Brick have been commissioned to provide handmade bricks to match colouring and dimension of the existing bricks. Of the existing bricks the brick quantities to be salvaged are as follows:

250 'standard' bricks to be salvaged (of 615 bricks) 30 cant bricks to be salvaged (of 120 bricks)

All bricks which cannot be re-used on the chimney will be retained on site.

It is not proposed to re-build the internal 'wiffs' as the from of the chimney will hold the structure and due to the original thin nature of these (50mm) they are considered to be unstable in situ. The lower level wiffs are to be retained and will be held in place by a new stainless steel channels. This stainless steel fram will then allow the renewed stack to be re-constructed upwards. Details of this are provided in the engineering drawings.

The proposal will ensure the longevity of the chimney and will ensure its ongoing stability and secure it and the properties future, as well as removing the likely risk of collapse. The extent of eventual repair and the form of the chimney would have led to the need to dismantle parts to rebuild, which in turn would have led to a lessened re-construction. The existence of cement pointing was to result in a large amount of raking out and further disturbance of the brickwork and this in turn would lead to a loss of bricks due to the hard cement. A large number of bricks were already cracked and a good number of bricks can be salvaged and will be retained and re-used in situ.

All heights and overall dimensions will be faithfully reinstated and a more sympathetic corbeled head detail will be introduced.

The following photos show each elevation of the chimney at levels B & C and illustrate the lean; exposed and rusting metalwork; cement pointing and open joints; cracked and missing brickwork.

Photos of the chimney at Level B



North Elevation



East Elevation



South Elevation



West Elevation

Photos of the chimney at Level C



North Elevation



East Elevation



South Elevation



West Elevation

4.2 Appearance

The chimney will be re-built in a like for like materials and form. The only change will be the removal of the pyramidical brickwork and the replacement with a simple corbelled detail as the provided drawings. This corbeling has been taken from the northern chimney as a reference point.

<u>4.3 Use</u>

The property is a private residence.

4.4 Scale, Amount & Layout

There will be no alteration to the scale, amount and layout of the property.

4.5 Materials

Existing bricks will be re-used where possible and where new bricks are required, these have been hand made to match the exact dimensions and colour blend of the existing brickwork. The bricks are circa 45mm in height. This brickwork will be pointed in a 1:3 (NHL 3.5: coarse sand with added grit).

The chimney flaunching to the top of the existing brickwork to be retained around the diamond brickwork arrangement and to the top of the stack is to be 1:2.5 (NHL5: coarse sand).

2 new chimney pots will be fitted to the top of the stack, to serve the two open fires on the ground floor, these are to be Terracotta beaded, round parallel pots 250 x 300mm.

4.6 Access

There are no access matters associated with this work.

4.7 Landscaping

There is no landscaping associated with this work.

5.0 Consultation

Consultation with both Neville Doe of Historic England and the local Conservation Officer Natalie Drewett. Copies of the consultation from Neville Doe follows but key sections from the responses was

NB. In the consultation there was reference to works to the Northern chimney, this work was not undertaken and repairs were made to the chimney as approved.

Neville Doe, Historic England

We note the advice and recommendations of the structural engineer, and the proposed solution of dismantling the stack and reconstruction from the midsection upward, along with the removal of the brick capping and replacement with a simple corbel detailing. This would appear to be a significant level of intervention that would affect its significance to some degree, and is therefore somewhat regrettable. That said we recognise in situ repairs are likely to be ineffectual given the widespread failure of many of the existing bricks, and we accept that comprehensive

rebuilding would allow an opportunity to reverse the more recent poor-quality repairs and address structural issues to ensure a more guaranteed future for both the stack and the building as a whole. We would however stress, that we would welcome every effort to retain any surviving original construction where possible. We would also strongly encourage the salvage of any undamaged bricks for reuse in the reconstruction so that as much of the building's original/historic fabric is retained.

We have no objection to the removal of the brick capping which we understand is a late C19 /early C20 addition. Whilst it is arguably of some minor historic interest it detracts from the architectural composition and aesthetic interest to some extent. It also seems likely that the additional loading has contributed to the instability of the stack. Provided that the replacement detail is based on historical evidence of the original chimney design this is an opportunity to better reveal the significance of the original design intent.

We understand that the exiting brick capping is a late C19 /early C20 addition, and. whilst it is arguably of some minor historic interest it also detracts from the architectural composition and aesthetic interest to some extent. It also seems likely that the additional loading has contributed to the instability of the stack. So as well as addressing the identified structural issues, the proposed replacement is also an opportunity to better reveal the significance of the original design intent. Therefore provided that the replacement detail is based on sound historical evidence of the original chimney design, we would have no objection to this element of the proposal.

This response was endorsed via conversation with Natalie Drewett, before and after the consultation with Historic England.

5.1 Historic England Response



Mr Ed Thuell Whitworth Chartered Architects and Building Surveyors Unit 12 Park Farm Fornham St Genevieve Suffolk IP28 6TS Direct Dial: 07554 437321

Our ref: PA01198366

22 March 2023

Dear Mr Thuell

Pre-application Advice

RIVER HOUSE, KERSEY, SUFFOLK

Thank-you for your enquiry of 24 February 2023 seeking pre-application advice concerning works at the above site.

Advice

The River House occupies a prominent position adjacent to the splash within the picturesque village of Kersey. The house dates from c.1500 and has a complicated history, being subsequently extended and remodelled in various phases through to the nineteenth century. It is listed at grade II* in recognition of it possessing more than special architectural and historic interest and so falls within the top 5.8.% of listed buildings nationally.

The proposal concerns restoration of the north and central chimney stacks. Our response is based upon the information that you provided in your email of 10 March 2023 which includes photographs, advice from your structural engineers, and observations from your heritage consultant. We also had a follow up telephone conversation on 17 March 2023.

Central Stack

The chimneys are a distinctive architectural feature which with their distinctive sculptural brickwork contribute to the overall significance of the building in NPPF terms. Whilst they contain substantial amounts of historic fabric, it is apparent that they have also undergone reconstruction / repair and alteration which may have contributed to the current structural issues. The photographs indicate that hard mortars have been used extensively to repoint, that there is substantial cracking of various bricks, and that the stack is leaning towards the rear of the building (East). We also note the later addition to the top of the chimney which we understand was



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introduced as an 'engineering solution' as an attempt to achieve stabilization. It is also understood that 'adapted bricks' were used in the construction of the corners rather than proper 'dog leg' bricks and that this has not necessarily provided the requisite level of lateral strength within the stack.

We appreciate that the current poor condition of the chimney is cause for concern in terms of public safety and also in terms of the potential damage to the building, and we understand the desire to address these issues. Notwithstanding this, intervention to the building's form and fabric has the potential to affect its significance to some extent, and therefore in accordance with established conservation principles and practice our preference would always be for the retention and repair of historic fabric in situ where possible and practical.

We note the advice and recommendations of the structural engineer, and the proposed solution of dismantling the stack and reconstruction from the mid-section upward, along with the removal of the brick capping and replacement with a simple corbel detailing.

This would appear to be a significant level of intervention that would affect its significance to some degree, and is therefore somewhat regrettable. That said we recognise in situ repairs are likely to be ineffectual given the widespread failure of many of the existing bricks, and we accept that comprehensive rebuilding would allow an opportunity to reverse the more recent poor-quality repairs and address structural issues to ensure a more guaranteed future for both the stack and the building as a whole. We would however stress, that we would welcome every effort to retain any surviving original construction where possible. We would also strongly encourage the salvage of any undamaged bricks for reuse in the reconstruction so that as much of the building's original/historic fabric is retained.

We have no objection to the removal of the brick capping which we understand is a late C19 /early C20 addition. Whilst it is arguably of some minor historic interest it detracts from the architectural composition and aesthetic interest to some extent. It also seems likely that the additional loading has contributed to the instability of the stack. Provided that the replacement detail is based on historical evidence of the original chimney design this is an opportunity to better reveal the significance of the original design intent.

We understand that the exiting brick capping is a late C19 /early C20 addition, and. whilst it is arguably of some minor historic interest it also detracts from the architectural composition and aesthetic interest to some extent. It also seems likely that the additional loading has contributed to the instability of the stack. So as well as addressing the identified structural issues, the proposed replacement is also an opportunity to better reveal the significance of the original design intent. Therefore provided that the replacement detail is based on sound historical evidence of the original chimney design, we would have no objection to this element of the proposal.

Northern chimney







We understand that this chimney is a later addition that dates to the C19 and that it has not been subject to inspection by your structural engineer. However, we note the submitted photographic evidence and your observations from your own inspection that there is substantial cracking in the brickwork and movement within the stack.

Whilst this chimney is of relatively less significance than the central stack, by virtue of its later date, it is nevertheless historic and makes some contribution to the overall significance of the heritage asset. Therefore the same starting point of retention and repair should be applied, and we would strongly encourage that the minimum amount of dismantling is carried out where possible, along with the removal of the cementitious render and repointing in traditional lime mortar. We do however accept that a certain amount of rebuilding is inevitable if structural issues are to be addressed adequately, and we recognise the benefits that this will yield in terms of the overall conservation of the heritage asset.

If however we are to give our full endorsement to the extent of rebuilding that you propose -28 brick course, then we advise that any formal LBC application should include a proper documented inspection of the northern stack by your structural engineer, as per the central stack, in order to provide "*clear and convincing justification*" in accordance with the requirements of the NPPF (paragraph 200).

Next Steps

Thank you for involving us at the pre-application stage. We are broadly content with your proposals, subject to you addressing the issues as outlined above before any statutory approval is sought.

Yours sincerely

Neville Doe Assistant Inspector of Historic Buildings and Areas E-mail: neville.doe@HistoricEngland.org.uk

RIVER HOUSE, KERSEY, SUFFOLK Pre-application Advice



