#### LIME COTTAGE, BELL LANE, CASSINGTON, OXFORDSHIRE

# HERITAGE IMPACT ASESSMENT FOR THE REPLACEMENT OF SEVEN NUMBER WINDOWS AND ONE NUMBER DOOR

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#### 1.0 INTRODUCTION

- 1.1 Purpose
  - 1.1.1 This Heritage Impact Assessment has been prepared by Iain Humphrey to inform a proposal to replace seven windows and a door at Lime Cottage, Cassington. Lime Cottage is a Grade II listed building. The report has been prepared based on extensive advice from Janus Conservation, JP Heritage, Palmer And Partners architects and Enlightened Windows.
- 1.2 Structure of the report
  - 1.2.2 The structure of the report is as follows:
  - Section 2 Identification of heritage assets to be considered as part of this Heritage Assessment.
  - Section 3 Assessment of significance of the building.
  - Section 4 Assessment of significance of the windows and doors.
  - Section 5 Heritage impact assessment of the proposed alterations.
  - Section 6 The whole building approach.
  - Section 7 WODC design guidance
  - Section 8 Historic England guidance
  - Section 9 Conclusions

### 2.0 IDENTIFICATION OF HERITAGE ASSETS

### 2.1 Paragraph 194 of NPPF

2.1.1 The National Planning Policy Framework (NPPF) sets out national planning policy relating to the conservation of the historic environment. It advises that in determining planning applications 'local planning authorities should require an applicant to describe the significance of any heritage assets affected, including any contribution made to their setting. The level of detail should be proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance (paragraph 194).

### 2.2 Identified heritage assets

### **Designated heritage assets**

- 2.2.1 The Grade II listed The Laurels lies to the north-west of Lime Cottage. There is no inter-visibility between the two buildings and Lime Cottage is not considered to form part of the setting of The Laurels. The Cassington Conservation Area lies to the south-west and south of Lime Cottage. Although Lime Cottage forms part of the historic development of the village it is some distance from the conservation area and visually severed by modern dwellings. There are no scheduled monuments, registered parks and gardens or registered battlefields adjacent or nearby to Lime Cottage.
- 2.2.2 Lime Cottage was added to the statutory List of Buildings of Architectural or Historic Interest at Grade II on 29th June 1988. The list description reads as follows: House. Mid C18. Coursed limestone rubble; gabled stone slate roof; stone end stacks. 3-unit plan. 2 storeys, symmetrical 3-window range. C20 gabled hood over early C19 sixpanelled (2 glazed) door. Timber lintels over C19 three-light casements, and C20 casements on first floor. Interior not inspected but likely to be of interest.

## 3.0 ASSESSMENT OF SIGNIFICANCE OF THE BUILDING

- **3.1** Two heritage reports were carried out for applications 21/03030/LBC (withdrawn) and 22/02742/LBC by Janus Conservation and JP Heritage respectively.
- 3.1 The Janus report states that the Lime Cottage is a good example of an 18th century vernacular building with a plan form that reflects the social economic status of the original owners contributes to the historical value of Lime Cottage. The JP report concurs with this assessment.
- 3.2 The Janus report states that the aesthetic value relates to the traditional crafts and skills contained within the fabric of the building, particularly traditional masonry and carpentry skills. The JP Heritage report considers that aesthetic value particularly relates to the floor beams, fireplaces and butt purling roof structure as well as the symmetrical pattern of openings on the front elevation, all including chamfered

timber lintels. The overall form with a gabled roof, end stacks and outshut to the rear contribute to aesthetic value.

3.3 With regards to communal value, both the Janus and JP Heritage reports agree that Lime Cottage makes a positive contribution to the street scene along Bell Lane but is generally of low communal value.

## 4.0 ASSESSMENT OF SIGNIFICANCE OF WINDOWS AND DOORS

- 4.1 The property dates from the mid-C18th and is a Grade II listed building but is not part of the conservation area. None of the extant windows are believed to be original, however, there are two C19th three-light casement windows to its front elevation (W1 & W2), and one C19th fixed window to the first floor of the south east elevation (W6).
- 4.2 The two ground floor windows to the front elevation, and fixed window to the south east elevation, although not original to the building's construction are of significant age and although there is certainly decay present, they are not beyond repair, and could be retained.
- 4.3 All other windows date from the mid C20th, are relatively poor quality and are of low heritage value. As many are also exhibiting decay, the most appropriate course of action would be replacement.
- 4.4 The front door is a good example of an early C19th six-panelled door, although it is missing several of the original panels and requires repair.
- 4.5 All of the windows and doors were found to have a poor energy efficiency rating and consideration should therefore be given to remedial measures such as draught proofing and secondary glazing, which are non-invasive and should not require listed building consent.

## 5.0 HERITAGE IMPACT ASSESSMENT OF THE PROPOSED ALTERATIONS

- 5.1 All windows and the door that are proposed to be replaced date from the mid C20th and are of low heritage value. Therefore the replacement of these will not negatively affect the heritage value of the property.
- 5.2 The proposed new windows and door frame and casement sections are to be of the same slim width as the existing C20th and C19th windows. The proposed new windows will be glazed using slim 16mm thick double glazed units and the new bars will frame the individual panes.
- 5.3 The proposed new door D2 and windows W4, W5, W6 and W7 will be replaced with a single pane of glass without glazing bars. The multipaned design of the existing door and windows is replicating other windows on the elevation as opposed to being in keeping with an original style. The new glazing pattern is more in line with other

historic buildings within Cassington. Windows W1, W2 and W3 will be replaced with two pane casements as opposed to the current four pane arrangement. Again the four pane arrangement has no historical significance and was likely following fashion at the time or to match with the other windows below. The new two pane casements are more in keeping with the traditional subdivision for the cottage and also in keeping with many windows installed in the historic buildings within Cassington.

5.4 All existing glass that is to be replaced as part of the alterations is modern sheet glass and therefore no aesthetic value will be lost if these are replaced with the proposed slim double glazing.

### 6.0 THE WHOLE BUILDING APPROACH

- 6.1 As part of application 22/02742/LBC, the flooring and rear roof covering of the heritage asset will be replaced.
- 6.2 The roof structure will now be fully insulated with a wood fibre insulation system leaving the roof as airtight as is possible and reasonable and fully breathable.
- 6.3 The existing flooring is modern parquet and linoleum throughout the ground floor stuck with a layer of bitumen adhesive which prevents breathability above the existing limecrete slab. This will be removed and replaced with a lime screed with underfloor heating within and limestone tiles therefore making the entire ground floor breathable once more. No insulation will be added to the floor due to insufficient height.
- 6.4 No insulation will be added internally to any external walls therefore leaving all external walls breathable.
- 6.5 The existing external pointing has been carried out in Portland cement, presumably during the 1965 works. This prevents breathability of the overall external wall construction. This will be removed carefully and replaced with lime mortar therefore reinstating the walls original construction and breathability.
- 6.6 Due to the fact that the floor, walls and roof will all remain breathable for moisture to freely pass through as was intentioned when the property was built, it would be considered that the installation of 8 number double glazed openings would not affect the property's ability to deal with moisture build up due to normal inhabitation and changing seasons.
- 6.7 Due to the fact that the floor and walls will remain uninsulated to retain/increase the building's breathability. Installing slim double glazing in the 8 number openings would be considered necessary to increase the overall energy efficiency of the building as a whole.

#### 7.0 WODC DESIGN GUIDANCE

7.1 The below guidance is set out in document 10 – Design guide windows and doors.The proposal's responses are in red :

Double-glazing can often result in unacceptable visual harm to the character and fabric of Listed Buildings, owing to its conspicuous modernity, the visible internal refraction of light within the units, and unduly deep glazing bars. However, it may be deemed acceptable in some limited circumstances. Assessments made in respect of double-glazing in Listed Buildings will be carefully made on a case-by-case basis, the merits of the proposals set against the relative merits of the existing windows.

As a broad guide, the following are examples of scenarios in which it is unlikely that Listed Building Consent would be granted for change, including from single- to double-glazing:

- Material changes to windows that are substantially original;
- Material changes to windows belonging to the nineteenth-century or earlier;
- Material changes to appropriately detailed traditional window types, particularly in a primary, street-facing or public elevation.

All windows and doors within the proposal are not original and are of 20<sup>th</sup> Century (C. 1965) construction.

All existing windows and doors within the proposal are inappropriately designed as shown in the section drawings (section drawing comparison.pdf). The glazing pattern of the existing windows also has no historical significance.

The proposed windows are more appropriately detailed, mostly in the glazing pattern (subdivision) and internal mouldings. This will achieve a heritage improvement in aesthetic value as well as an improvement in communal value, especially to the front street elevation.

Again, as a broad guide, the following are examples of scenarios in which it is possible that Listed Building Consent might be granted for change in certain circumstances, including from single- to double-glazing:

- Material changes to windows that are recent and of poor quality or untraditional appearance or materials, where a net gain to the character or appearance of the Listed Building can be clearly demonstrated;
- Material changes to windows in later extensions (most notably perhaps rear extensions), which would entail no harm or result in a clear improvement to the character or appearance of the Listed Building.

All windows and doors within the proposal are manufactured from softwood pine of poor quality as well as a poorly painted finish which is the reason for their poor condition after only 60 years. This is compared to the similar condition of the C.19<sup>th</sup> Century windows on the ground floor that, although are in need of attention, are at least 120 years in age.

The proposal is to use windows and doors manufactured from slow grown Danish pine with a much higher concentration of heartwood than standard European pine. The external beading is all manufactured in larch. The painted finish is much thicker than a standard finish thus increasing longevity of the window vastly compared with other similar products. This demonstrates that the proposed windows are of exceptional quality and finish.

7.2 The below guidance is set out in document 16 – Design guide greener traditional buildings. The proposal's responses are in red:

Government guidance used to hold that double glazing was seldom if ever appropriate for a Listed Building. Current advice holds that the potential damage of such a change needs to be weighed against the potential to mitigate the impact of climate change.

Whether single-glazed windows in a Listed Building should be replaced by double or even triple-glazed windows, or whether some form of double-glazing should be added – will always need to be judged on a case-by-case basis; however, considerations will include:

a) The importance of the existing windows to the character and appearance of the building;

The proposed windows and door have low heritage value due to their 20<sup>th</sup> Century inappropriate glazing pattern and moulding details as well as their poor quality.

 b) Whether an equivalent increase in insulation could be achieved by other means – such as increased roof insulation and/or more efficient heating equipment (see below) – which are likely to be less detrimental to the character and appearance of the building. It is worth noting such alternative methods can also be more cost effective;

The roof is being fully insulated as part of application 22/02742/LBC. The external walls and ground floor will not be insulated as it is felt that this would be greatly detrimental to the historic fabric. With regards to the walls, much of the original lime plaster remains in good condition and with regards

to the ground floor there is an existing limecrete floor which, although probably not original, holds some evidential heritage significance.

As part of application 22/02742/LBC, a new air source heat pump is to be installed as a means of heating and hot water for both the modern extension as well as the heritage asset. This is part of the government initiative to move away from fossil fuels in the battle to mitigate climate change and increase the energy efficiency of the housing stock across the country. Due to the lower flow temperatures of a heat pump system, it is necessary to carefully consider the heat loss of the whole building.

The applicant is aware that the mitigation of climate change and need for energy efficiency is not a sole reason to install slim double glazing into a traditional property. However, with the above in mind as well as the fact that the existing windows and doors all hold low heritage value and there would be zero negative impact of the heritage value of the overall building with this proposal, it would be considered reasonable to allow the installation of slim double glazed units as a way to help mitigate climate change.

c) The extent to which the design and appearance of the window relies upon the precise size and detail of frame and glazing bars. For instance: the narrow and finely-detailed glazing bars of C18 sash windows are one of the fundamental aspects of their design – features that cannot accommodate double-glazing of any thickness. On the other hand, replacement of traditionally detailed flush casements with minimum horizontal subdivision can sometimes accommodate double-glazing with only a limited impact on their appearance;

The design and appearance of the front elevation is of particular importance and significance as, although Lime Cottage is not within the conservation area, it holds significant aesthetic and some communal value as described in the heritage report by Janus. The existing first floor windows all contain modern sheet glass and the glazing pattern holds no historical significance.

The proposal includes a glazing pattern that is much more appropriate to the asset as well as matching the majority of other historical buildings in Cassington. The slim double glazed units will have black spacer bars within to keep the appearance of individual panes of glass. Due to the modern sheet glass currently installed, the new slim double glazed units will not cause a significant difference in light reflection or refraction and therefore will not worsen the current heritage value of the existing glass.

d) The skill and care with which a building owner or their design adviser has analysed the current situation, appraising alternatives and, where these demonstrate that a change of window form may be appropriate, the skill with which the change is designed and detailed to have the minimum impact on such matters as:

- designing the window to solve the actual technical and aesthetic issues;
- the proportions of the window and its subdivision;
- the size and detail of frame and glazing bar sections;
- the impact of flat reflective modern sheet glass replacing older glass types where some distortion is a key characteristic;
- the choice of spacer bars for double-glazing that match the colour of the frame (brilliant white and silver seldom being appropriate for traditional buildings);
- avoiding the use of fake elements, such as applied glazing bars or applied lead strips.

The applicant will carry out the work proposed. The applicant is a carpenter and joiner with 20 years experience, 12 of these years were spent refurbishing grade 2 listed properties across Hampshire and London, including Georgian, Regency and flint construction properties and therefore is well aware of the considerations needed when carrying out any work on traditional buildings. The design and access statement lays out the exact method of replacement.

The proposed windows do solve the technical and aesthetic issues as well as the size and detail of frame and glazing bar sections and the window subdivision as described in detail above. The impact of modern sheet glass has also been discussed above.

No fake elements will be used and all glazing bars will separate the individual panes of glass.

e) Adding shutters where none exist, or replacing existing shutters with better insulated and more air-tight versions could well be a cheaper alternative to double-glazing; it could also have a less damaging impact on the appearance of the building. On Listed Buildings, original shutters are usually an important part of the character of the building; in which case, as with windows, a carefully detailed alteration

There are currently no shutters on any of the windows or doors within the property. Whilst there is no certainty, there is little indication that shutters were ever installed on any windows due to the fact that most of the original internal lime plaster remains and there are no obvious holes, recesses or plaster repairs that would indicate this. Equally, there is no external ironmongery or holes in the stone work that would indicate that external shutters were once installed. Therefore, installing shutters would not be considered a heritage benefit to the building.

### 8.0 HISTORIC ENGLAND GUIDANCE

Historic England have recently released a report titled; Climate change and historic building adaptation.

This report is currently in the public consultation phase and it's aim is to, among other things, "support consistent decision making on what can be done and cannot be done to historic buildings to improve their energy efficiency and support carbon reduction, whilst conserving their significance."

Section 3, 56 in the report states that:

"This section sets out the approach to decision-making, highlights the key considerations needed to judge the planning balance for climate change and the historic environment, and seeks to provide clarity as to what is and is not acceptable in particular scenarios. It forms the basis for Historic England advice and should inform LPA decision-making."

Section 3, 81 in the report states that:

The replacement of windows which do not contribute to the architectural or historic interest of a building with double-glazed windows of sympathetic pattern, will generally be acceptable.

- Many historic buildings have windows which are either relatively recent, contribute to a building's special interest through their pattern and detailing alone, or detract from it due to their inappropriate design.
- In such cases, their replacement with double-glazed windows of an appropriate glazing bar pattern and detailing is likely either to be largely neutral in its effect on the building's special interest or may improve it.
- This will not be so in the case of original or earlier windows which contribute positively to a building's special interest through both historic fabric and design.
- More broadly, original and other historic windows which contribute to the special interest of a building should not be replaced (though their panes could be, see relevant section below). The replacement of windows will require listed building consent.

## 9.0 CONCLUSIONS

The proposal is to replace seven windows and one door, all of which are of very modern construction and of low quality and poor design with regards to heritage value.

The proposal is to replace all windows and door with exceptionally high quality joinery that have a much more appropriate design of frame, mouldings and glazing pattern compared with the existing windows.

The proposal satisfies all points in the Historic England report 'Climate change and historic building adaptation' with regards to the replacement of windows.

The proposal also satisfies all points within the WODC design guide.

The overall proposal will not contribute to any loss of evidential value of the building and will contribute to a small net gain of aesthetic and communal value of the building.

Therefore, this assessment is of the opinion that the proposal will provide a small net gain to the overall heritage value of the building as well as helping to mitigate the impact of climate change hoping that the building can be enjoyed for generations to come.