Design & Access Statement

Number 22 Bridge Street King's Cliffe has been known by a number of names in its history, these include; The Priest's House, and Teacher's House. In the National Heritage List for England, it is referred to as; The School House, 22 Bridge Street. Below is the full list entry.

KINGS CLIFFE BRIDGE STREET TL0097 (South side) 12/100 No.22 (The School House) 23/05/67 (Formerly listed as Teachers House (formerly the Priest's House) (2 dwellings)) GV II School and schoolhouse, now house. Datestone 1752. Founded as a school in 1727 by William Law, datestone refers to rebuilding. Squared coursed limestone with Collyweston slate roof. Originally probably 2-unit plan, the school room occupying most of the upper storey. 2 storeys. 4-window range of leaded cross windows under wood lintels and with ashlar dressings. Small circular window to first floor left. 6-panel door, to right of centre, is also under wood lintel. Ashlar gable parapets and stone stacks at ends. Panel immediately above door has inscription "Charitati Sacrum 1752". One-bay outbuilding attached to right, now forms part of house and has plank door to left. Ashlar gable parapets and lateral stone stack. Rear elevation has central leaded casement, under wood lintel. Gable end, abutting Bridge Street, is blank. Interior not inspected but noted as having fielded panelled screen to side of staircase, cupboard understairs with wooden ventilation grille and splat balusters to first floor landing.

Its past names tell us much of the building's founding history as it was constructed as a school, and as a house for its teacher, on the instruction of the Rev. William Law. Born in King's Cliffe in 1686, William Law was a theological writer, and philanthropist, who was educated, and then taught, at Emmanuel College, Cambridge before later retiring to the village in 1740. In 1727 he established a school for fourteen poor girls, and in 1752 he erected a new building to house them and their mistress. It is this building, and its later additions, that this statement concerns.

The building remained in the ownership of the charitable foundation that William Law established until it was first sold in 2021, and, at that time, it had sat empty and unlived in for over ten years. Although it had been maintained up to a point, little by way of building work has been done since the mid twentieth century aside some relatively recent stripping out of wall paper and floor coverings, and the removal of most of the bathroom sanitaryware. As a result, whilst the building may have evaded much of the damage so often afflicted on old houses by that latter half of the last century, it is greatly in need of some conservation, repair, and gentle modernisation. 22 Bridge Street is a Grade II List Building but the intention is to approach the proposed works as if it were of a higher listing, and fully committed to the principles and practice set out by the Society for the Protection of Ancient Buildings (SPAB).

Design

The building is made up of three parts; there is the original, and main, two storey section of 1752, with a later smaller extension (referred to as an outbuilding in the list entry) to the south, and a much smaller lean-to extension to the south of this. Though it is difficult to judge for sure, it seems most likely that these stages of building, though distinct, were not separated by many years (decades rather than centuries), as the building of all three parts draws on the same palette of materials and uses the same forms of construction. In all three parts the walls are of local squared and coursed limestone with ashlar limestone used for; quoins, door and window dressings, parapet gables, and chimney stacks. An earth mortar, with lime mortar pointing, has been employed to bond the stonework. The lintels for the windows and doors are of oak, as are the remaining original window and door frames. The glass of these original windows is formed of leaded lights and the opening casements are wrought iron. The original six-panel front door is of pine. Above this door a stone panel has the (rare) inscription 'Charitati Sacrum'. All three of the roof areas are framed using oak and covered with Collyweston stone slates.

Further examination of the building's fabric reveals the evidence for these different periods of construction, and of the alterations that have occurred throughout the building's history in terms of both form and use, as well as those changes wrought by the passing of time. Although 22 Bridge Street is fortunate to retain a lot of its original and historic fabric, it has not fully escaped some negative and inappropriate interventions, especially those from the twentieth century use of 'modern' cement-based materials. This Design and Access Statement, and the accompanying Heritage Statement, set out the proposals to repair the building and details how this will be achieved as sensitively, and sustainably, as possible via the use of traditional, and often local, natural materials and techniques. Great care for the built and natural environment is central to the ethos of all the planned interventions.

The present ground floor of the original part of 22 Bridge Street now consists, in the main part, of a cement concrete slab, which dates from the middle of the 20th century. This had been covered with thin vinyl tiles that have previously been removed, with only a few traces remaining, along with their shadows in the ugly black bituminous adhesive that was used to attach them and that is the current finish. Of much greater interest are a couple of remaining areas of older, probably original, floor. There is a small area of flagstones in the hearth of the main fireplace, and in the understairs cupboard, and the small pantry, there is a charming red brick floor (see Photos 3 & 4). The later extension's ground floor (the site of the former kitchen) is mostly of attractive 6" square red and black quarry tiles, with a couple of small areas laid with a slightly different red quarry tile which are considered to be replacements or repairs (see Photo 5). These substitutions, whilst functional, have not been executed with the same high level of craftsmanship as the rest of floor. The floor of the lean-to is higher (up a couple of steps) and is formed of a hard modern cementitious concrete.

The present concrete floor in main section of the building has a number of short comings. Firstly, it is damp in a number of regions which suggests the localised failure of the damp proof membrane or brings into question its existence. Secondly, it is covered in an unpleasant black bitumen adhesive that would be almost impossible to remove. And finally, its level is such that no covering greater than a few millimetres high could be laid without facilitating the, unacceptable, need to remove historic wooden fabric from the bottom of all the downstairs internal doors. This undoubtably limits the choices of flooring material available, and would certainly rule out any that are appropriate in a heritage setting, locally sourced, or made from a natural insulating material. The front door's timber threshold has been lost to this floor too which is a blow both aesthetically, as a concrete door sill (see Photos 6a & 6b) is incongruous in a 18th century building, and functionally, as it lets in the rain.

Furthermore, to the failings of this specific floor, heavy concrete slab floors, even those laid perfectly, are wholly incompatible with buildings of such age and construction as 22 Bridge Street. The building's wonderful palette of soft and flexible natural material; stone, earth and timber, require a floor made up of similar substances that allow the building to gently move and flex as a whole. Such a floor would also enable the slow release of moisture across its entire surface thus preventing the flow to and build-up of damp in the walls so often the consequence of a modern impervious floor, and reducing the likelihood of fabric damage. In his book "Precious Inheritance" Bevis Claxton regards the removal of a concrete floor from an old building as being "always an act of conservation".

It is proposed, therefore, to remove the existing areas of concrete floor and to replace it with a lime-based flooring system, and that the Ty-Mawr Sublime insulated limecrete floor is employed. This system is LABC registered (approved February 2013) and offers many advantages over a cement based concrete product as well as other limecrete systems available. Lime based floor slabs offer the ideal balance of strength, flexibility and breathability needed at 22 Bridge Street and have been installed in hundreds of old buildings around the country. The sublime floor system, in preference to other limecrete floors, requires less excavation and therefore fewer disturbances to the building, uses less material, and contains recycled glass aggregates that again help to minimise virgin material use and waste. As an insulated system it will significantly improve the building energy efficiency and has been specifically designed for floors that contain underfloor heating which is proposed in this instance. Heating in this way is less intense, more broadly delivered and, therefore, ideally suited to old buildings being much gentler on sensitive historic fabric. Underfloor heating is also the most compatible system of heat delivery when paired with a heat pump, the installation of which is also being proposed below.

This new limecrete floor in the main section of the house will be finished with local limestone flagstones from the quarry just outside of Oundle (or from a nearby Lincolnshire quarry if the Churchfield stone flooring is no longer available) and laid on a hydraulic lime mortar. The existing areas of original or historic flooring with be left undisturbed. The small areas of previous repair to the quarry tile floor in the former kitchen will be re-made to a higher standard and using black and red quarry tiles, that best match the rest of the floor, for both functional and aesthetic reasons. The lean-to extension's limecrete floor will be finished with a local stone tile.

The present Collyweston roof of the lower range (Photo 7) is in a poor condition and, unfortunately, needs renewing. This is even more disappointing in view of the fact that it is not long ago that it was last re-slated, evidenced by the use of a modern twentieth century bituminous roofing felt. The roof has failed much earlier than would be expected for a number of reasons. Firstly, bad luck, as it appears that the roof has been struck by a heavy falling object, such as a chimney pot. But secondly, and perhaps more significantly, due to poor craftsmanship in its laying, including the roof having been 'stretched' to save slate, and therefore money, but only serving to shortening its lifespan. The only reason the roof does not leak more than it already does is the existence of the roofing felt. The roof has been inspected by three Collyweston specialists who shared the same opinion as to its condition.

The advantage of this adverse situation is that it presents a number of unique opportunities. Firstly, there is the chance to increase the beneficial properties of the roof and, therefore, the building as a whole, by creating a 'warm roof space'. The area below the south range's roof houses the remains of the former bathroom and it is intended that it will retain this function. As with any room below an uninsulated 'cold roof' this room suffers from becoming very cold in the winter but then with overheating in the summer and with the associated threats to the building's fabric that such extremes of temperature bring, for instance, the formation of condensation. The summer of 2022 provided a particular example of this climatic heating phenomena and was, in all likelihood, an illustration of similar future summer heat. The ability to add well detailed natural fibre insulation above the rafters (often referred to as sarking insulation) and between the rafters provides some protection against changing environmental factors and offers several other significant advantages:

- Insulation above and between the rafters reduces heat lose, energy use, and environmental impact.
- Acoustic performance and sound proofing is improved.
- Tight fitting insulation in an unbroken layer over the rafters reduces air infiltration, improving the performance of the insulation and helps avoid the risk of thermal bridging where other objects cross the insulation layer.
- Insulation above the rafters leaves the historic structure of the roof on the warm, dry side of the insulation. This reduces the risk of condensation on the timbers, the timber decay that could follow, and so improves the health and longevity of valuable fabric.
- The provision of sarking board with a relatively high density effectively increases the mass of the lightweight construction of the roof reducing potential overheating of the internal environment from solar gain.
- The mass of the sarking board will absorb thermal gains from appliances and occupants internally improving environmental conditions.
- Hygroscopic materials can absorb but also release excess moisture, acting in this way as a buffer, during fluctuations in humidity thus reducing the risk of surface and interstitial condensation occurring, and so improving the internal environmental conditions.
- Sarking boards between the roof coverings and the rafters reduce wind loading, act as a secondary barrier against water penetration and can considerably strengthen the roof by stiffening and bracing the rafters.
- Natural materials are breathable and compatible with the performance characteristics of old buildings.

Secondly, it affords the access required to carry out timber repairs to the foot of one of the roof structure's oak rafters that has begun to deteriorate, and working to achieve this without a roof covering, and the extra space that this affords, will facilitate the undertaking of a better-quality repair. Finally, it provides the ideal occasion to introduce two compact conservation rooflights. These new skylights will introduce more natural light and offers a better provision for natural ventilation (in regards to temperature and humidity), in so doing reducing the need for artificial light, and ventilation, and the concomitant energy burden. Improving the facility for ventilation is especially important in a moisture generating bathroom, and in any room housed into the pitch of the roof structure.

There are some disadvantages to taking this approach; the slight raising of the level of the roof, the increased weight, and a number of technical challenges, such as the eaves detailing. But it is believed that these are considerably outweighed by the many advantages on offer, and can be fully assuaged through thoughtful planning, attention to detail, and high levels of workmanship. The slight increase in roof height can be freely accommodated in the depth of the gable parapet, and will be lessened by the removal of modern counter battens that were used on the rafters nearest the gable wall, probably in an attempted to level out the irregularities in the roof when it was last slated. The construction method of the roof means that there is no need to redesign the eaves to allow for the deeper roof profile. The oak wall plates, which form the supporting base for the rafters, sit in the centre of the depth of the external walls so there is ample room (approx 300mm) to house the extra height without extending beyond the edge of the wall. As a consequence, it will not be necessary to alter the position of the rainwater goods. The enhancements being suggested will be almost invisible, aside from the new conservation rooflights, producing a roof that will appear all but indistinguishable from a one that has not benefitted from such a modification.

The proposal is to carefully remove the current Collyweston slates (and clay ridge tiles), then to grade and store all sound slates ready for reuse on the renewed roof. Some new Collyweston slates will be needed to replace any loses and to resolve the current 'stretching' issue. The oak roof frame will be fully examined and the known rafter repair completed, along with any others that are highlighted by the inspection, employing traditional joinery technics and using well-seasoned locally sourced English oak. Tongue and grove, wet process manufactured wood fibre sarking board insulation will then be fitted closely following all manufacturer's instructions. Wet process manufactured wood fibre has been chosen because of its superior ability to transport moist and to absorb heat, while being better at sound proofing, and also due to the more environmentally benign nature if its production. There are a number of LABC registered systems being considered at this planning stage, such as Ty-Mawr Limes Ltd.'s Warm Roof Insulation System. British grown and manufactured hemp insulation will be fitted between the rafters. Wood fibre and hemp insulation offer a number of additional general benefits beyond those already mentioned above, being; made from waste materials, made from renewable raw materials that absorbed carbon when they growing, compostable, recyclable, fire resistant (charring not burning), and non-toxic (requiring no protective equipment when working with it). Wood fibre sarking boards (at the thickness being advocated) also provide a useful element of flexible when marrying them to an undulating old roof. A pair of small triple glazed conservation roof lights will be carefully installed in the rear (ESE facing) elevation in the lower half of the roof, and fitted in spaces between the rafters so that the historic roof structure is retained complete and undisturbed (aside gentle repair). Supporting local oak sill

trimmers will be added, using stainless steel screws, with the roof purlin acting as the head trimmer. Skylights in this part of the roof will not be visible from any public domain, and are hidden from the view of the adjacent property by their barn's roof. A Collyweston slate room will be laid, utilising the stored slate from the old roof and new Collyweston slates to make up the shortfall, using traditional vernacular methods, including leadwork and the re-seating of the clay ridge tiles. All cast iron rainwater goods from this roof will be retained, and refitted after having been stripped and repainted in a linseed oil paint. The suggested insulation works on the roof are made following consultation of, and in accordance with the advice from Historic England's guidance note; Energy Efficiency and Historic Buildings: Insulating Pitched Roofs at Rafter Level, and that found in the SPAB book Old House Eco Handbook.

The oak wall plate at the head of the small south facing window of the lean-to has deteriorated considerably, and there has been extensive loss of material that compromises its structural role. The rest of this beam is not currently visible, being hidden elsewhere by the roof covering externally and stonework internally, so its condition is unknown until further opening up facilitates a more complete inspection. Remedial repair work on this wall plate is essential irrespective of the findings from an additional examination but the information gathered in doing so will help determine the degree of reparation necessary, or whether a whole new wall plate is required. The oak rafters of this roof frame appear, from below, to be good condition but a couple of them have been sistered with modern sawn pine beams which suggests that a full assessment of the frame would be most prudent. In order to undertake this investigation and repair works the roof will need to be stripped back to it oak frame. Whilst the condition of the roof covering is reasonably good there has been the extensive use of a hard cement mortar in it's laying (or later repair) which is, for a host of reasons, far from ideal and the opportunity to remedy this would be an added benefit of the repairs necessitated. Furthermore, it also provides the occasion to upgrade the roof in the same way being suggested above for the lower range's roof. There are currently no rainwater goods on this section of roof.

As is being advocated for the lower range's roof, it is proposed that the lean-to's current Collyweston slates (see Photo 8) be carefully removed, graded, and stored on site for later reuse. The oak roof frame will be fully assessed and all repair works undertaken using locally sourced English oak to match that existing, and employing traditional joinery technics. The frame will then be covered with wet process manufactured wood fibre sarking insulation system before the Collyweston slate covering is reinstated, with any shortfall being made up with a quantity of new Collyweston slate. Traditional lead work will be employed throughout, and new cast iron rainwater goods will be fitted that discharge to a rainwater storage tank to provide irrigation for the garden. It is also being proposed that an area of solar thermal panels be attached to this roof. Not only will this improve the overall energy performance of the building but this area of roof is ideally situated to house solar thermal panels. It is south facing and at a good angle of pitch for maximum exposure to the sun light, and is situated right next to the room proposed for the hot water cylinder so there will only be short connecting pipe runs, minimising heat loss. Renewing the roof covering provides the perfect opportunity to attach panel brackets to the roof structure, avoiding the disturbance that takes place with later retrofitting. The roof faces away from the road and so any panel installed would not be visible from the public domain.

Moving back inside, there is a large inglenook fireplace at the base of the main range's south chimney. It has been narrowed a number of times in the past, and more recently reduced to a much smaller opening, with the in-filled area having been plastered in a modern gypsum plaster (see Photo 9a). A modern stone and cement mortar surround had been constructed, and an electric fire installed. There was a long narrow horizontal crack at the junction between the area of gypsum plaster and original lime plaster. It was agreed during a site visit by Lloyd Mills (Principal Conservation Officer) that an exploratory opening up should be undertaken to explore the condition and the history of this fireplace, and to seek an explanation of the cracking. Accordingly, the modern fire surround and plaster were removed to reveal beneath, with much disappointment, a rough cast in-situ concrete mantel and the crude jumble of modern brick and rubble which had been used to fill the space below (Photo 9b). This concrete mantel is very ugly, and represents the 20th century's heavy-handed use of brutal materials that are completely in conflict with the historic construction forms and aesthetic of the building. Above this concrete beam, an area of stonework was uncovered that had been coarsely rebuilt using a hard cement mortar. The hoped-for original oak mantel had lamentably been removed. The, brick and rubble, infill was cleared to reveal the more historic narrowing of the opening, and a chimney completely full of sticks (and other materials) deposited by generations of Jackdaws in the process of building their nests. This considerable quantity of nesting material has been removed, in the process exposing an original wrought iron pan or kettle hanger set into the stonework of the back of the fireplace, and has allowed for a full examination of the flue. The older works of narrowing extend into the lowest area of the flue and have been built in stone and timber with an earth or lime mortar. They have been made on both sides forming an opening reduced by approximately 30% and placed centrally in the previous aperture. The condition of the added stonework and timber has deteriorated considerably, and is now very poor in places having long been exposed to the harsh conditions within a fireplace. Behind, and on all of the original internal faces, is a layer of limewashed lime plaster, providing good evidence that the initial inglenook fireplace once occupied the full width of the space.

The proposal is to carefully remove the stonework that has been used to reduce the fireplace opening and the lower flue, so that the inglenook fireplace may be returned to its original dimensions. This will free up valuable internal space and provide a small source of stone for carrying out harmonised repairs elsewhere in the building but, more importantly, it will help to bring back one of the building's most significant historical and architectural features - its large inglenook fireplace. Another important element of this undertaking is to remove the current concrete mantel and to replace it with a new locally sourced English oak mantel. As one of the building's most significant internal features, this fireplace deserves to be crowned with a mantel hewn from English oak, surely the only material worthy of this position. The area of stonework above the mantel will be rebuilt using an earth mortar and then plastered with a lime plaster on top of an earth plaster base coat, as is the practice for the rest of the building. The works to substitute current mantel, and the dimensions for the new oak mantel, will be specified after consultation with a CARE accredited structural engineer. The original wrought iron kettle hanger will be conserved and retained.

The majority of the walls and ceilings in the house were originally plastered with a base coat of earth plaster and a top coat of soft non-hydraulic lime plaster. The ceiling plaster is applied onto a substrate of lath bound water reed in the locally traditional way. Unfortunately, in a small number of places throughout the building the original earth and lime plasters have previously been removed,

and then replaced with a modern imperious plaster. Elsewhere, the original plasters have been damaged and on both floors of the building's lower range all the internal walls have been plastered using a sand and cement plaster finished with a skim coat of gypsum plaster. Whilst once considered the solution to resisting moist ingress, it is now understood that modern impermeable materials exacerbate damp conditions and promote problems within solid wall construction. Therefore, their use in any works to old buildings is wholly inappropriate, and is detrimental to both the health of those building and to their inhabitants.

The proposal is to take a pragmatic and combined approach when completing works to the internal plastering. The areas of the walls, and ceilings, plastered with cement or gypsum will have these modern imperious materials delicately removed. Site mixed plasters will be prepared that best match the building's existing historic earth and non-hydraulic lime plasters. The clay for the earth plaster will be dug from the site, and testing to establish an ideal mix has already been completed. Local sand will be used for both plasters and non-hydraulic lime putty will be sourced from Lincolnshire. These natural plasters are compatible with the building's construction, will flex and give with the movement of the structure, and allow any moisture that penetrates the walls to evaporate back out. They will then be employed in two instances. Firstly, in the sensitive repair of regions of damaged historic plaster and, secondly, as a replacement plaster in areas where original plasters have been removed in part and substituted piecemeal with cement and gypsum plasters. In the rooms of the lower range where no historic plaster remains it is being suggested that a lime hemp plaster, made of non-hydraulic lime putty blended with hemp plant fibres. An example product is manufactured from entirely British materials by Ty Mawr Lime in Wales. Due to remaining extremely breathable, lime hemp offers a number of advantages for this region of the building over the use of other lime plasters;

- It is made from a natural, renewable plant fibre (instead of depleting a natural aggregate resource).
- It has greater flexural strength than traditional lime plasters making it extremely durable e.g., it is far more resilient for use on corners, reveal and other vulnerable areas of the building.
- It has thermal properties and can therefore be used to help improve the insulation performance of the wall.
- Whilst the level of insulation afforded is significant it is not sufficiently high to preclude the movement of some heat into the wall. This is important as it helps to maintain a healthy temperature gradient through the thickness of the wall and so reduces the risk of interstitial condensation developing
- It adds to the thermal mass of the building helping to protect against overheating
- It improves acoustic performance and sound proofing.
- It can assist with the airtightness of old buildings, improving the comfort of the room and offering energy savings.
- By being highly breathable and able to absorb large quantities of moist hemp lime contributes to the functional health of the building by helping to regulate humidity, making for a healthier internal environment.
- Is ideal for use in rooms that generate high levels of moist, such as bathrooms

The plaster will be applied in two or three coats with the top coat of consisting of a more traditional non-hydraulic lime and aggregate plaster. This top coat will be prepared and mixed on site. The new

lime plaster ceilings will be applied following the example of the building's historic ceilings, namely, applied onto a lath bound reed substrate. The lath used will be riven English oak lath, and the reed Norfolk grown. The use of reed as a plastering substrate is another way to gently introduce internal insulation, therefore reducing energy use without compromising function.

In order to assess how successfully the areas of hard modern plaster can be removed whilst causing minimal disturbance to the underlying structure or surrounding historic plaster, a number of trial test patches have been conducted. A lump hammer was used to make a series of firm but controlled blows to the plaster in order to fragment it and weaken its bond with the underlying substrate. This method proved very successful, in part, due to the bond between wall and plaster already having become weakened by the accumulation of moisture at this interface. In the lower range where no original plaster remained, the plaster came away even more easily due to the existence of limewashed stonework beneath. It would, therefore, seem most likely that the walls in this part of the building where never originally plastered but limewashed instead. This is consistent with this range having originally been an outbuilding, most likely a wash house, and only more recently being brought into the envelope of the main building.

The building's former school room occupies the majority of the upper floor of the building's main range. Following the Education Acts of 1870 and 1880, a new school for King's Cliffe was established and 22 Bridge Street was closed as a school and converted into a house. It was at this time when a new partition was inserted, and the first floor converted into bedrooms. This Victorian era partition wall, constructed of timber with lath and plaster, separates the stairs (which had previously risen into the room) and the round window from the greater part of the room (see Photo 10a). It may also have been at this stage that the original field panelled screen, which initially formed the back wall of the school room, was moved forward slightly to enlarge the bedroom beyond (see the Heritage Statement for more detail on the subject of these changes). The late 19th century partition is now in a relatively poor condition, with a number of holes through it, and there is a broader deterioration of the plasterwork. This partition also results in an area of wasted space next to the stairs that is only accessible by squeezing through a 24cm gap between the splat balusters and the wall (see Photos 10b & 10c).

The proposal here is to carefully dismantle and remove the Victorian partition so that the original proportions of the old school room can be enjoyed once more, and its main features reunited. This room represents the building's founding purpose and is fundamental to its historically, architecturally, and culturally significance. Therefore, to fully appreciate this space and to understand what this building represents, it needs to be seen in its entirety. In order that we benefit from all this room has to offer (it also has the best views out), it is intended that this new space become the main living room of the house. As it will no longer be a bedroom it does not need to be distinct from the stairs, and so the partition wall becomes redundant. The materials from the partition are of practical value and will be salvaged to be used for repair projects elsewhere in the building, or stored for later such use, so they will not be wasted. It is not being suggested that the field panelled screen be moved back to its original position, as it is felt that any advantages gained by doing so are outweighed by the disadvantages. First amongst these negatives is the potential of causing damage to the screen. The approximately 45cm that would be taken from the bedroom

behind the panelled wall would be a much more significant loss to that smaller room when compared to the proportionate gain to the larger school room.

The upstairs room of the lower range houses the building's bathroom, and has a single window that faces south. In common with all of the building's windows and doors the stonework around this window is formed from fine ashlar quoin stones. This window differs though as its wooden frame only occupies the upper half of the original opening defined by the external ashlar quoins, with the areas lower half having been filled in with stonework (see Photos 2 & 11). Removal of the internal cement plaster around the window opening (as part of the modern plaster removal trial) revealed that the same situation exists inside. The proportions of this opening are that of a door rather than a window and the presence of the head of the door frame (with its mortise peg holes) remaining in situ above the timber window frame supports this hypothesis (see Photo 12). It seems likely that the upstairs room was originally only accessed through this doorway, perhaps up a set of timber steps or similar, before an opening was cut through into the main section of the house (see the Heritage Statement for more detail). The infill stonework is rather crude in comparison to the masonry found in the rest of building's walls and has been constructed with the use of a very hard cement mortar, which would indicate that this is modern work from the twentieth century. The situation here was complicated by the presence of a plastic soil pipe, which has now been removed, that ran across the blocked-up section. Very disappointingly, the hole for this soil pipe has been knocked through the lower most quoin stone, effectively cutting it in half. The quoin stone on the opposite side has also been damaged (thankfully to a much lesser degree) by another hole cut for a drainage pipe (also now removed). The current softwood timber window is of modern stormproof construction and it does not appear that it was made specially for the opening, but rather it is a best match standard sized window with the space around 'made good' afterwards. There is a painted plywood covering panel above the window, and relatively large mortar joints to each side (see Photo 11). The window itself is in fair condition, is not markedly draughty and does not let in rain, but the same cannot be said for the 'made good' region around the window frame which is neither windtight or watertight.

Directly below the bathroom window, downstairs, is the kitchen window (see Photo 7). This is a modern, softwood, stormproof casement window and is the room's only window but, it too, profits from being south facing. Unlike the window opening upstairs this one retains its original proportions and in common with the house's other windows, it is outlined with fine ashlar quoin stones. The outermost oak lintel above the window has rotted substantially, which unfortunately necessitates its replacement, and the window assembly itself has begun to deteriorate significantly. Again, this is an example of a standard window that has been made to fit its opening and together with the failing lintel above result in it not being terribly weathertight and explain, in part at least, its poor condition. The works to renew the oak lintel would provide an ideal opportunity to improve the situation with this window.

The small lean-to was built separately from the lower range 'outbuilding' section of the house and was originally accessed through a door in its front west facing elevation. This doorway was later blocked up, no doubt around the time when an internal entry was knocked through from the adjacent room (see Heritage Statement for more detail) but the old openings border of ashlar quoin

stones can easily be identified (see Photo 13). Only a very small window remains where this door once stood and being sized so, it limits the amount of daylight that shines into the interior of the room behind. The little window is relatively modern, and hinged at its base.

The proposal is to remove all three of these current modern windows described and to insert new bespoke windows and frames. The kitchen window will retain its present, and original, measurements. For the bathroom window the ugly in-fill masonry will be taken down to return this opening to its original proportions. And in the lean-to the opening will be enlarged, not back into a door, but into a window the width of the old doorway and, approximately, a third of its height. Reinstating the former dimensions of these original openings will bring into relevance a significant architectural detail of the building, its beautiful ashlar quoin stone. The new larger windows will allow in more natural light, thus reducing energy use from artificial lighting, and will also improve the capacity for natural ventilation, especially important in a moisture producing bathrooms.

The windows' design will be informed by the manner of the building's historic windows and will utilise the in-situ head of the old door frame in the bathroom. They will be a traditionally crafted flush casement windows of local English oak, with moulding detail inspired by those of the house's historic windows, and painted with an off-white linseed oil paint. The casements will be single glazed (the intention is to use handmade English cylinder glass) but the windows will be constructed with integral hinged secondary double glazing and oak shutters. Most of the building's original windows retain their timber shutters so it seems right that any new windows should also have wooden shutters so that the building can benefit from all the advantages they offer, for example, better security and energy efficiency. The new windows will satisfy a number of key requirements. By being handmade from high quality local materials following historic forms, and patterns of construction, they will be a beautiful and complimentary addition to the history of the building whilst at the same time offering improving its; energy efficiency, provision of natural light, ability to be naturally ventilated, weathertightness, and security. None of these windows are in the main elevation, being at the end of the building away from the public road, and will not be visible from outside the building's own garden or adjacent private field.

The entrance door to the lower range of the building is, unfortunately, not its original door. This door is modern with modern fixtures and fittings, including some fake screw on strap hinge blanks (since removed), it has a small square of glazing, and has not been made for the door frame that it is attached to, being far too big and so it closes pushed up against the back of frame rather than securely fitting into it. As a result, when it rains heavily this precipitation runs down the front of the door, overcomes the weatherboards, and leaks into the building. This may help to explain why the door sill and both frame jambs, though made of oak, have deteriorated to such an extent, and require extensive repair (see Photo 14).

It is intended that a new door is made that fits perfectly within the present frame, once it has been repaired using local English oak and traditional scarf joints. The door sill will need to be restored with a new oak beam. The new door will also be crafted from local English oak finished with a linseed oil paint and be of simple plank construction reflecting this part of the building's initial role

as a wash house outbuilding. This new door will improve the weathertightness, the energy efficiency, and the security of the entrance whilst also representing an aesthetic enhancement of this Listed Building.

In the house's current sitting room there exists a 1950's tiled fireplace (see Photo 15). It is in quite a bad state of repair with many of its tiles being cracked or broken, particularly on its hearth. Its proportions are not in harmony with the dimensions of the room, as the hearth projects too far into the room. It has a somewhat dominating effect on the interior of the room without offering much in return, be that functional, aesthetical or with regards to historical significance, or value. This fact is only emphasised by its poor condition. In the right heritage context, and when in good order, the best examples of these fireplaces are a real asset, but here and, in the setting of this eighteenth century room, none of the right criteria are met.

Therefore, it is proposed that this fire surround be carefully removed, any masonry and plasterwork thoughtfully repaired and the original fireplace dimensions regained. The works on the limecrete floor will, anyhow, necessitate its dismantling. It will be swept and cleared of the Jackdaw nesting material that has no doubt been deposited and fills the flue. This will allow for a condition inspection of the chimney and the chance to undertake any remedial action needed. At this stage the flue will be temporarily sealed with a draught excluding chimney balloon, or woollen 'chimneysheep' device, and a period of reflection observed before any further plans are made for its reuse, for example, the installation of a wood burning stove.

The building requires rewiring, its plumbing needs renewing and it currently has no form of central heating. The ideal time to address all of these issues is when broader works of conservation and repair are being made to the building. All cable and pipes for these installations will be carefully made within existing voids and service runs so that no new hole will need to be made and no further harm comes to the historic fabric. The building also has lots of places where sensitively detailed surface mounting can easily be hidden, such as the understairs areas. It is being proposed that all of the building services are moved to, and contained within, the lower range and lean to sections of the building that already contain the water supply and the drainage. These are also the lower status areas of the house, that were originally built to fulfil a service role so it seems historically appropriate to return them to this purpose. These are also the parts of the building that have seen most negative intervention in the past and so require the greatest degree of repair which will provide the opportunities needed to install services, and the associated equipment without having any further negative impact.

The intention is to move the location of the kitchen into the central downstairs room of the house, the one that contains the large inglenook fireplace. This would seem fitting historically as it is highly likely that this room, with its fireplace and kettle support, was the building first kitchen, to return the room to its original function. During the clearing of the rubble from behind the modern in-fill of the fireplace a few broken remains of an old cast iron range were discovered, including a nice hinge section. There is also a small understairs pantry accessed from this room. From a contemporary point of view, kitchens now form the heart of an archetypal 21st century home so it would not be

without logic to move the kitchen to the physical centre of this house as part of its sensitive modernisation. The current kitchen will become a combined utility and services room and, from here, a new heat pump driven heating system will deliver to the underfloor heating areas downstairs, and to cast iron radiators upstairs. The utility room itself will also be heated with a cast iron radiator as it retains its historic quarry tile floor. Cast iron radiators are a good match with underfloor heating and heat pumps as they heat up slowly and retain their heat for longer. They also provide the correct aesthetic. The external unit for the heat pump will be situated in the least sensitive area of the building, on the lean-to section of the house, facing away from the public road, and view, and shielded further from within the garden by judicious landscaping and planting. The lean-to's single room will remain as a toilet but may also house some service equipment. The electricity supply and meter will be moved to the new utility and service room, with the new cable running hidden behind the rear elevations guttering, and downpipe, before reaching its entry point. This act in itself will affect a number of beneficial changes, as it will heal the buildings most important elevation from the wound of the present electricity supply cable that zig zags its way across the front of the house (see Photo 1) before entering through the front door frame.

External to the building, but within its curtilage, the garden wall contains a single pedestrian entry gateway from the public road. The current modern 'wrought iron' style gate (see Photo 16) is made of steel, painted black, and with its associated steel gateposts appears to date from the 1999 work to improve disabled person's access. The proposition is to remove the gate and gateposts, and to replace them with a solid English oak gate and matching gate posts. Whilst also improving privacy, this change is targeted at reducing the noise and particulate pollution generated by the road beyond from entering the garden. This will help to enhance the peaceful setting of the historic enclosure, and the listed buildings that it contains.

The Appearance of the building will remain predominately unchanged. There will be; a very slight increase to the roof height of the lower range and the lean-to, the new rooflights, and the solar thermal panel. It will be improved by the rerouting of the electricity supply cable away from the front elevation, and by the new windows and door. All these subtle changes are described above.

The Layout of the building will remain, principally, as is existing aside from the removal of the late nineteenth century partition wall upstairs, and the reordering of the functions of some rooms detailed above.

The Scale of the building will remain unchanged.

Access

Access to the property will remain unchanged, and unaffected by the proposed works.

Conclusion

In conclusion, the works being proposed above are in accordance with, and guided by, a number of key principles. First, and foremost, amongst these is the SPAB approach which asserts that building fabric is precious. This methodology is based on the protection of this fabric, the material from which a building is constructed and the primary source from which knowledge and meaning can be drawn. Materials and construction methods embodied in building fabric illustrate changes in people's ideas, tastes, skills and the relationship with their locality. Fabric also holds character and beauty; the surfaces, blemishes, and undulations of old buildings speak of the passage of time and of past lives lived. Wear and tear will add a beautiful patination that new work can only acquire through the slow process of ageing. Secondly, the materials used in the works will be those most compatible with the historic fabric. Where fabric has already been lost and replaced with inappropriate materials then, when able to do so without causing further damage, these modern materials will be replaced with new work that is completed using time tested materials contemporary with the building original construction. Repairs to damaged fabric will also be made using these natural materials namely; stone, lime, earth, and oak, that allow the traditional construction of the building to function as intended and provide the most suitable aesthetic to enhance the building's character. Thirdly, all renewal works are designed to be obvious examples of new work that take inspiration from the old building rather than trying to restore an imagined original. Authenticity will be found by employing the correct materials, and technics, and not from copying a supposed historical style. Last, but definitely not least, the belief that environmental conservation and energy efficiency matters should be a primary concern of all undertaking from the sourcing of local natural materials, with a low embodied energy, to the use of new technologies that conserve energy and reduce consumption. It is intended that the schedule of works outlined above will, not only, make the building healthier and more beautiful but that they achieve this with the lightest touch on our planet, hopefully helping to safeguard both of their futures for the generations that follow.

This Design and Access Statement should be read in conjunction with the accompanying Heritage Statement.