# JACKDAWS FORD
# Chelsworth

## Design & Heritage Statement

To accompany applications for Planning Permission and Listed Building Consent

March 2023

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Architects

## Contents

**Introduction**

This statement describes potential changes to Jackdaws Ford, for which Planning Permission and Listed Building Consent is sought.

Jackdaws Ford is a Grade II listed house in a central village location in Chelsworth. The house has been much altered but the earliest parts of the building date from the 15th Century.

The potential changes are all relatively modest and, it is hoped, uncontentious; nonetheless listed building consent and planning permission will be needed. The changes are proposed in order to improve the practicality and quality of the accommodation in the house, without causing harm to the listed building. Changes to physical fabric have been deliberately focussed on areas of the building with modern or much altered fabric, and no changes are proposed to any of the medieval or Tudor frame which are the elements of highest significance.

Proposed changes affecting the street scene are as follows:

- Re-instating a render finish over the exposed studwork – returning the building to the appearance as it was when first photographed in the nineteenth century, thus providing better weather protection to the oak and elm frame and helping to prolong its life.
- Replacing concrete ridge tiles with lead rolls on the hips of the former butcher's shop window extension and adding gutters, this being a roof which currently leaks due to its very shallow pitch.
- Removing foul drainage pipes on the east elevation, thus achieving some modest decluttering of pipework, and minor adjustments to windows around the back door
- Replacement of two existing rooflights on the rear range of the east elevation (facing the pub) with two one conservation rooflight in a different location, which will provide daylight and egress to a new bedroom
- Re-opening a first floor mullion window on the west elevation – currently infilled and blocked
- A new length of evergreen hedge to the west of the house, to provide more privacy to the garden

*Jackdaws Ford in 1870 showing render finish over exposed studwork, and lead roll hips and gutters over former Butcher's shop (Image published online at Chelsworth.org.uk)*

*Jackdaws Ford in 2023 showing exposed studwork, concrete ridge tiles over former Butcher's shop and foul drainage pipes on east elevation*

## Heritage Context and Historic Development

Jackdaws Ford is listed grade II, reference 1194140. The listing description is appended to this statement.

The house is noted as having 15th and 16th century origins which is borne out by evidence in situ. The house is noted in the listing description to have had its main block refaced in brick but the majority of the south wall has been fully rebuilt in brick, and many of the window openings are not in positions originally relating to the timber frame.

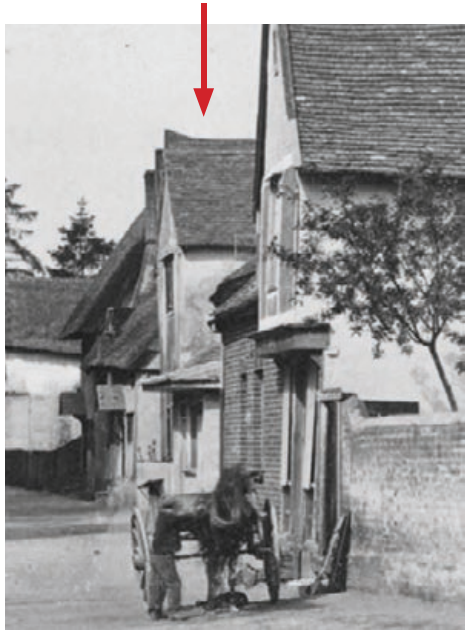
The house appears in a number of historic photographs of Chelsworth, and can be seen with a fully rendered exterior in the earliest photographs from the 1870s. In early 20th century photographs the house appears, as now, with elements of the timber frame exposed, following the late 19th century fashion for exposing timber frames regardless of condition or the original design intent.

A good selection of historic photographs is available to view on the village website www.chelsworth.org.uk

Various alterations have been consented since the original listing (1958) including unspecified internal alterations in the 1980s and most recently (2017) re-roofing.

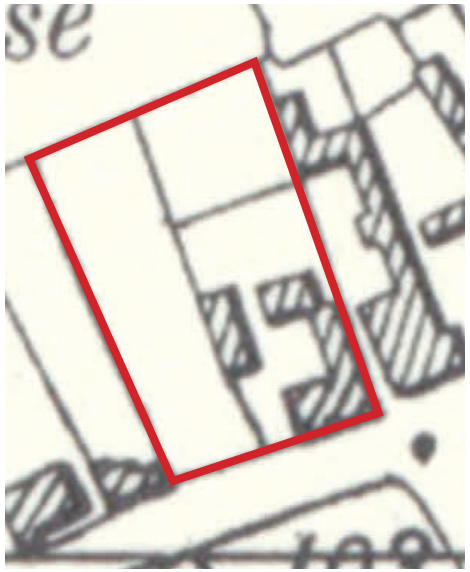
A simplified phasing plan is shown on the following page, which identifies the earliest surviving part of the building as being the elm-framed western cross wing (the current dining room, originally likely to have been a service wing with a buttery and pantry, perhaps even a shop front) and the hall (current drawing room). The service wing would have been jettied at first floor facing the street – this was later infilled below to increase usable ground floor space. In the first iteration the stair would likely have been at the northern end of this service wing.

The façade of this western wing is thought to have been substantially rebuilt when the timbers were exposed in the 20th century.



*Excerpt of photo from the 1870s with fully rendered exterior (Image published online at Chelsworth.org.uk)*

*Excerpt of photo from the early 20th century with exposed elements of timber frame (Image published online at Chelsworth.org.uk)*



*1958 OS Map - NTS - Current Jackdaws Ford boundary indicaded in red. (Reproduced with the permission of the National Library of Scotland)*

*Existing Block Plan - NTS*


GROUND FLOOR PLAN AS EXISTING

FIRST FLOOR PLAN AS EXISTING

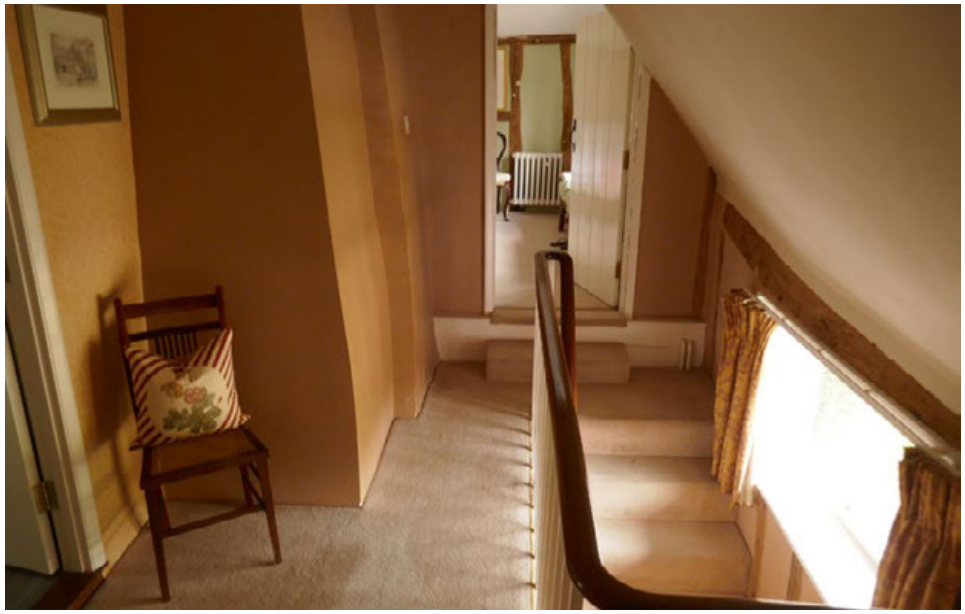
*Preliminary Phasing of existing ground and first floor plans*

The hall would have been an open hall when first built, the current ground floor ceiling being an inserted first floor of the 16th century. The western chimney (in the original cross passage) was probably first inserted in the 17th century but was substantially rebuilt in the 20th century. A winder stair most likely occupied the northern side of this stack and was probably removed when the current stair or its predecessor was inserted. The south wall of the hall was rebuilt (rather than faced) in brick, probably in the nineteenth century.

The rebuilding of the principal fireplace probably happened at the same time as the most recent staircase and landing alterations were carried out adjacent and upstairs; the stair has mid-late 20th century Georgian style stick balusters and a modern handrail and these may well date from the 1980s. The stair is thought to have been in its current location since the 19th century but has awkward headroom, is precariously close to the west bedroom entrance at first floor, and intrudes clumsily into the hall at ground floor level – this being an element where change is proposed.

The east part of the building now occupied by the kitchen and pantry would originally have been a late 15th century parlour. This part of the building was largely oak framed but has been much altered through various changes including conversion to a butcher's shop in the 19th century when the bay window was added to the street. At first floor level the current south wall is later and suggests that the southern end of this cross wing has been truncated. Within the roof there has also been much rebuilding, including the original north gable of the cross wing (now the north wall of the current bathroom, where reused timbers are clearly visible above the bath). Following the closing of the butcher's business, the building is thought to have become entirely residential.

The wing or range running north from the 15th century house appears nineteenth century in origin and includes a substantial bread oven, including two truncated flues, one possibly serving a copper and the other a fireplace for this part of the building. This wing was thatched in the 1870s (it appears on the edges of some historic village photographs), but it has been much altered in the 20th century, with floors, walls and roof all heavily rebuilt or altered; the roof is now entirely modern softwood and was reroofed in its entirety following a 2017 consent. Internal partitions are in plasterboard and modern studwork or concrete blockwork. In the mid 20th century the northern end of the wing included a garage accessed from the west, which at some point was converted (1980s?) and is currently used as a ground floor bedroom.



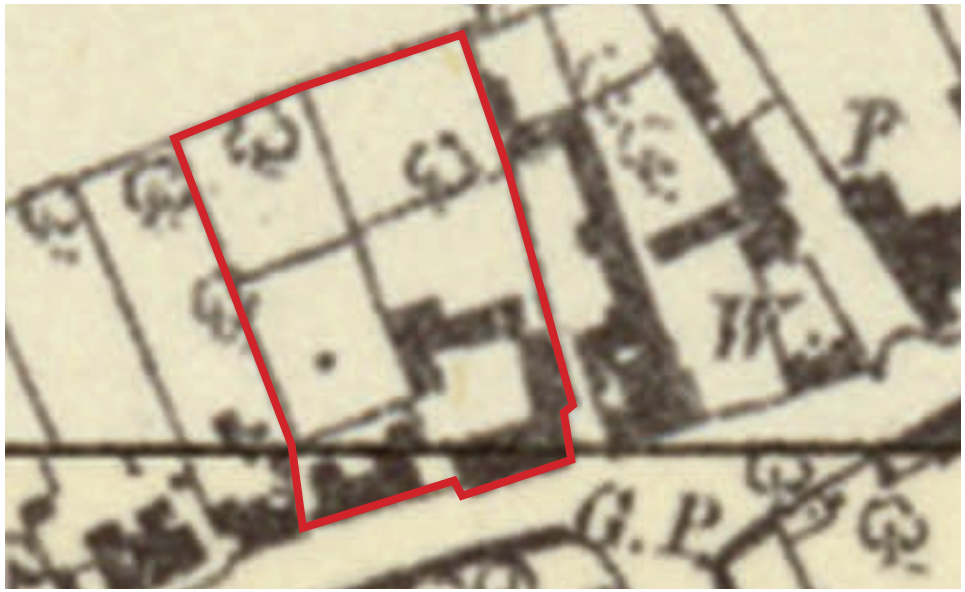
*Stair showing 20th century stick balusters and handrail, with entrance to west bedroom beyond*

*North wing in 2023, viewed from west. Former garage door opening encompasses two left-side windows*

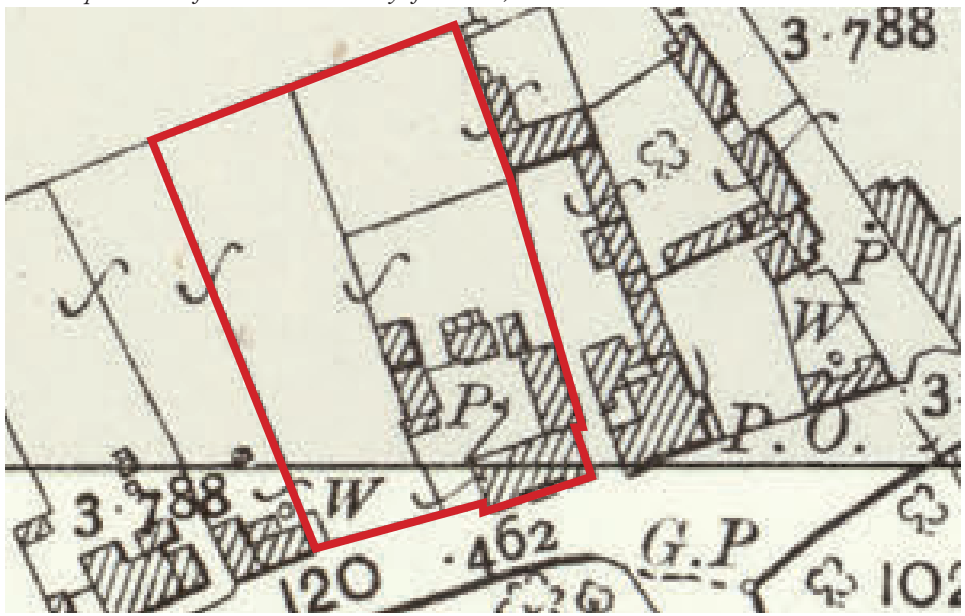
A courtyard of buildings existed to the north of the building in the nineteenth century (see 1880s OS map illustrated). These survived on maps through to the 1950s but by the time of the 1970s they had been demolished. They may in part have housed functions ancillary to the butcher's business, e.g. a slaughterhouse.

A thatched pair of cottages to the west of Jackdaws Ford was shown on the 1880s OS map but had been demolished by 1902. This building appeared in 1870s photographs and is also partly visible in a photograph of Jackdaws Ford which is included in a 1994 book on Chelsworth by local historian Bernard Quinlan; however, it was absent by the time of the 1902 OS map. The site of the lost cottages is now part of the Jackdaws Ford garden and garage area and the two landholdings were shown as one by the time of the 1974 OS plan.

The current garage was consented in 2008 and occupies part of this western area of the garden along with a parking area and vehicular road access.




*1880's OS Map showing courtyard buildings to the north and cottages to the west - NTS - Current Jackdaws Ford boundary indicated in red. The black horizontal line is a join between sheets. (Reproduced with the permission of the National Library of Scotland).*




*1904 OS Maps showing that cottages to the west of Jackdaws Ford present in the 1880s maps are now absent - NTS - Current Jackdaws Ford boundary indicated in red. The horizontal black line is a join between sheets. (Reproduced with the permission of the National Library of Scotland).*

**Proposed Changes in Summary**

The aim of the changes proposed is to address practical shortcomings of the house, to improve the longevity and energy efficiency of the building and to improve the quality of accommodation; all whilst enhancing and protecting architectural and heritage significance.

None of the primary framing or the medieval or Tudor core is to be altered; rather the changes proposed would lead to modest improvements in the legibility and appreciation of the historic core, through removal of later insertions of little or no architectural significance. Most change is proposed in the later and much altered northern range, where a new family kitchen can be formed which will be better connected to the garden than the house is currently. This kitchen is to be formed in an area where there is little heritage constraint other than the bread oven, which – appropriately - can become the principal feature in the new kitchen. Changes in this area, including a new garden porch and staircase, also enable the removal of the current staircase, this resulting in a major enhancement to the former hall (current drawing room), the most significant of the oldest rooms in the house.

*Bread oven to be retained and to become principal feature within proposed new Kitchen*

**Reintroduction of render to the exposed timber frame**

The main change in terms of street scene and external appearance is the proposed return to a lime-rendered frontage and west elevation of the western cross wing; the exposed frame was fully rendered in the 1870s and one imagines for a considerable time prior to that. As noted previously, the southern end of the cross wing has been infilled at ground floor level (removing the jettied appearance) and much of the south elevation of the hall has been rebuilt in brick or, at the east end, truncated and rebuilt.

The Morton Partnership (conservation engineers) have reviewed the structure and are concerned by deterioration in the timber frame which is exacerbated by exposure to the weather and an impermeable cement render. It is proposed to remove the cement render infill panels and repair the panel material behind the render, which is assumed to be either a clay/straw daub or brick infill. Once the cement-based infill panels are removed, the condition of the frame can be better assessed and appropriate conservation repairs undertaken.

On the face of the frame and infill panels, it is proposed to install a breathable woodfibre board retaining the panel infill surviving below the cement, and consolidating any voids either in clay daub or woodfibre so as to maintain breathability; over the frame it is proposed to apply a 40mm thick breathable woodfibre board insulation, and to finish this externally with a lime render and limewash. We have successfully implemented this approach on several listed buildings in Suffolk during the last 15 years. The finished appearance will be the same as lath a plaster finish but the insulation protects the frame better as it moves the condensation dewpoint further from the face of the frame, providing drier and more stable conditions for the frame; it has an additional advantage of improving the thermal performance of the wall without introducing risks to the fabric and without any loss of architectural character. The result of this change at Jackdaws Ford will be a return to the appearance of the house more as it was in the late 19th century, offering a significant improvement in the expected longevity of the building and improving the energy performance of the walls being overclad.

*Jackdaws Ford as seen from south west showing the west and south elevations. Blocked upper mullion window of west elevation is proposed to be reopened*

*Image showing failing cement render*

## The New Kitchen

In almost every domestic refurbishment it is a priority for building owners to achieve a comfortable family kitchen in which a family can gather, this reflecting the modern centrality of the kitchen as a sociable living space not simply a functional space for the preparation of food; and a connection between kitchen and garden has also become desirable for many of us, as we want to enjoy a more fluid connection between inside and outside.

Houses have always changed in response to our changing priorities and whilst listed buildings are less easily capable of change, changes can nonetheless be made if handled sensitively. It should be noted that the kitchen has already moved several times in the life of the building: the current kitchen has variously served as a parlour, butchers shop, kitchen and no doubt many other uses too.

Jackdaws Ford is fortunate in having the northern range as an already much altered and relatively late structure more easily accommodating change without causing heritage harm. Removal of the blockwork partition within the old garage is a straightforward alteration which creates a generous room, and none of the door and window openings on the west elevation are historic; these are late 20th century in origin and have been given a formal Georgian character which sits slightly oddly with the rest of the house given their presence in a lesser wing, and the late 20th century raised 'eyebrow' of roof seems an unnecessary visual complication. The proposed elevations redress this, offering a simpler external treatment in which this kitchen wing is subservient to the main house in detail as well as massing. The proposed window and door openings also respond to the altered use and configuration of the internal space in this area; the proposed French door is located within the former location of a garage door and provides access to a garden terrace from the proposed Kitchen.

Focussing change in this part of the building removes pressure for change from the older and more sensitive areas of the house whilst addressing the desire for an attractive and generous kitchen; it also concentrates the most intensive area of building services in the least sensitive part of the building.

A small larder and adjacent plant room is proposed at the northern end of the kitchen, this being a humble lean-to in the ideal location for a larder at the cold end of the building.

*Interior of north wing, showing blockwork partition wall in location of former garage, with steel ties above.*

*Jackdaws Ford as viewed from the north west area of the garden showing the late 20th century door and window openings, as well as the raised 'eyebrow' roof on the northern range.*

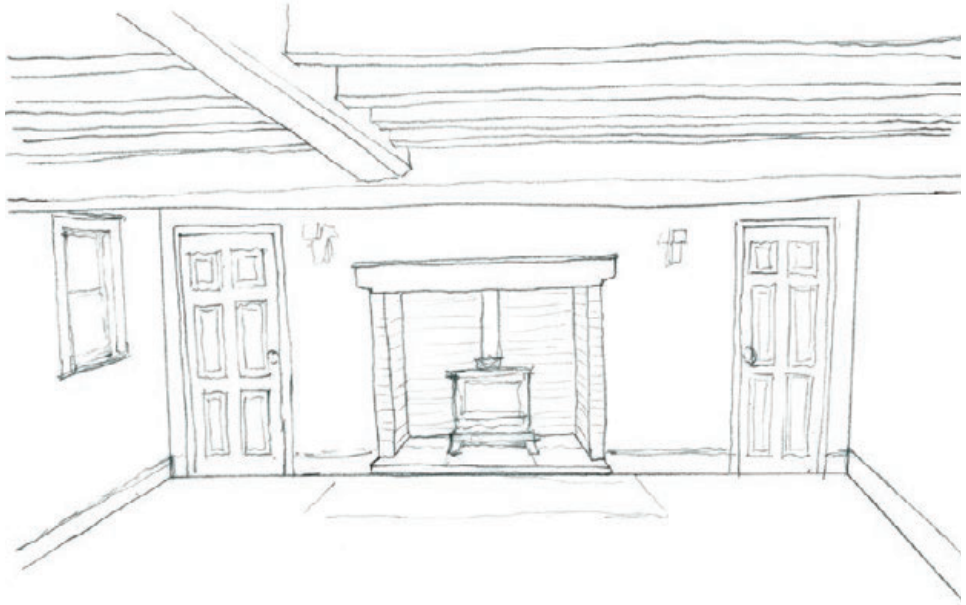
**The New Staircase**

Alteration in the north wing provides an opportunity to form a discreet back porch and a staircase compliant with building regulations which can connect upstairs rooms directly to the outside of the building without passing through any habitable rooms or past fireplaces; at present not all bedrooms have windows large enough to provide an alternative escape from the first floor and the staircase is not a reliable fire exit given that it passes through the drawing room (and past a fireplace).

The new staircase as proposed would also provide a route to an additional bedroom and bathroom space which is to be formed by making use of an unused first floor attic room and forming an additional area of first floor space next to the bread oven. Through the reopening of a blocked doorway behind the current shower in the family bathroom, this new staircase can also provide access to the entirety of the first floor.

With the blocked doorway re-opened, the new staircase would enable the current staircase to be removed; as mentioned previously, the current stair intrudes awkwardly into the highest status of the medieval rooms (the former open hall, now drawing room). In addition to its inadequacies as a fire escape, the current stair is also unsafe in terms of headroom and in the landing arrangement at the top of the stairs. It should be noted that this current staircase is probably (at least) the fourth staircase in the history of the house and is only thought to have been in this location since the 19th century; in addition to the advantages in terms of safe use and fire escape, its removal would overall be a 'heritage win' in terms of reinstating the proportions of the hall as it has been since the 17th century.

*Drawing Room (as seen from the adjacent corridor) showing the existing staircase intruding into the north side of the room*



*Proposed sketch of Drawing Room with existing staircase removed and existing door leaf reused*

**Minor Additional Changes**

Individual changes are listed in the detailed commentary of changes which follows below. All the changes are described room by room and noted on the proposed drawings. These changes do not negatively impact on architectural significance but are considered on balance to be either neutral or positive in terms of heritage impacts.

**<u>Exterior & Roof – proposed changes in detail</u>**

**South Elevation:**
The reintroduction of render to the exposed timber frame is noted in previous sections. In addition, deteriorating brickwork particularly at the low area of the former butcher's shop is to be repaired/replaced and this area redecorated, with the plinth re-rendered.

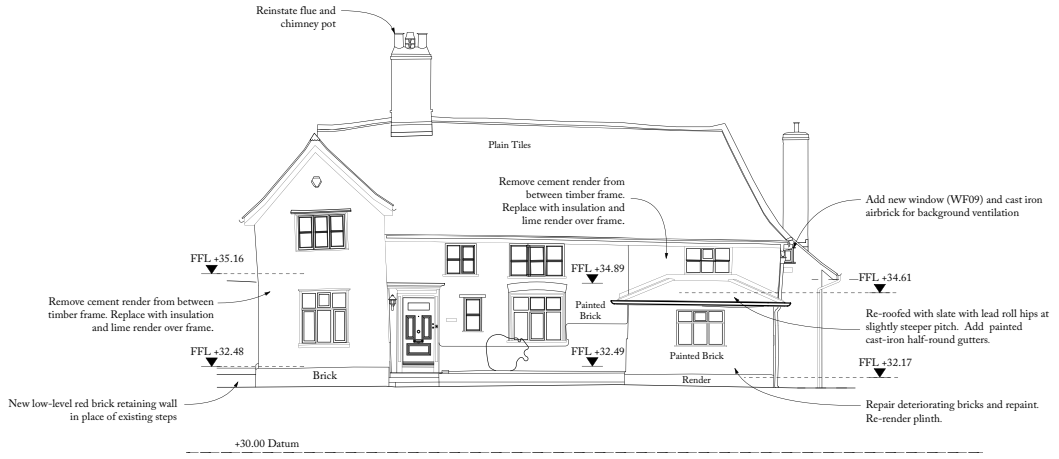
The existing shallow pitched slate roof (approximately 12° pitch) with concrete ridge tiles is to be re-roofed with slate with lead roll hips at a slightly steeper pitch (approximately 24° pitch). Painted cast iron half-round gutters are to be added, which will protect the building from excess water falling from the eaves.

A flue and chimney pot is to be reinstated on the primary chimney in order to reopen a former fireplace in Bedroom 1.

Additionally, a small street-facing squint window (WF09) is to be added to the new bedroom in the currently unused attic space above the northern range. This window and wall is significantly recessed from the street.

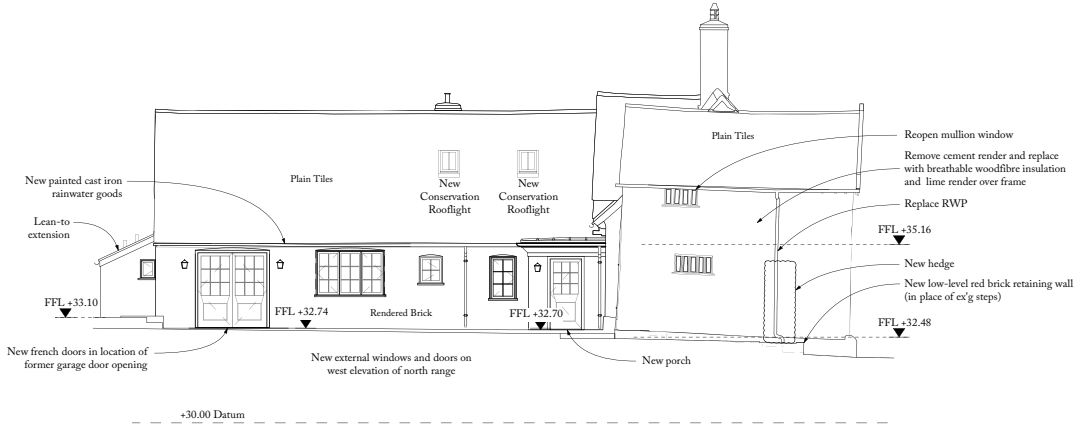
**West Elevation:**
Primary changes to the west elevation have been noted in previous sections. These changes include the reintroduction of render to the exposed timber frame on the western cross wing, along with the reopening of the mullion window (WF05) at first floor. Alongside these changes a rainwater pipe will be renewed, and landscaping is to be modified just to the west of the house, including the introduction of a new hedge as previously noted.

On the west elevation of the northern wing, changes to the doors and windows are noted in 'The New Kitchen' commentary earlier. Changes also include the addition of a new garden porch with rendered walls and a lead roof with painted




1 SOUTH ELEVATION
As Proposed, 1:100

*Proposed South Elevation NTS (Refer to 210. PL09)*




2 WEST ELEVATION
As Proposed, 1:100

*Proposed West Elevation NTS (Refer to 210. PL09)*

cast-iron half-round gutters. The existing plastic rainwater goods on the west side of the northern range are also to be replaced with painted cast iron rainwater goods, and 2no. small conservation rooflights are to be added to provide natural light to the stairwell and a bathroom.

**North Elevation:**
The existing cement render is to be removed from the north elevation and replaced with lime render and limewash.

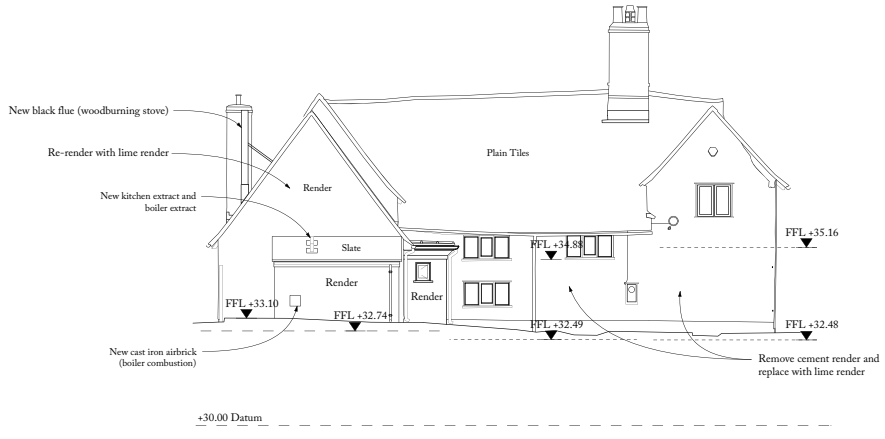
At the northern end of the northern range, a humble lean-to is to be added with walls externally rendered, a slate roof, and black plastic half-round gutters. This roof is to include extract vents for the boiler and kitchen extract, ideally located in the most discrete part of the house.

**East Elevation:**
Existing foul drainage pipes are currently exposed on the east elevation, these currently drain to a combined surface and foul water system. It is intended to re-route these foul drainage pipes internally to the foul drain system at the west side of the house, thus achieving some modest decluttering of pipework.

Minor adjustments to windows (WG16 & WG17) are proposed along with the replacement of the external door DG07 and pentice above. Door DG07 is a hollow-core door, probably installed in the late 20th century or early 21st century.

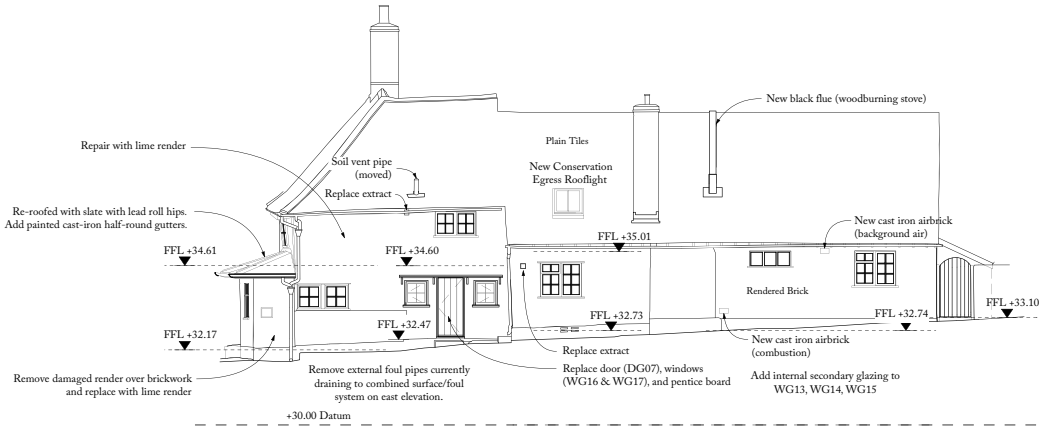
The render over brickwork on the east side of the former butcher's shop is deteriorating and coming away from the wall, apparently due to water rising from the ground in that area; which is vulnerable to excessive water coming off the roof (which currently is without a gutter) and the adjacent combined gulley occasionally blocking and overflowing. This render is to be removed and replaced with lime render. Additionally, existing render on the east elevation of the eastern cross wing shows some evidence of cracking and coming away from the wall; this to be repaired with lime render.

Changes to the east elevation of the northern range (facing the back of the pub) include adding a cast-iron airbrick for combustion air intake and a black flue for a wood-burning stove, adding a cast-iron airbrick at high level for background air, and replacement of an existing extract vent in the wall of the current/ proposed Utility Room. Two existing rooflights are to be removed and replaced with a conservation rooflight in a different location, which will provide daylight and egress to the new bedroom.




3 NORTH ELEVATION
As Proposed, 1:100

*Proposed North Elevation NTS (Refer to 210. PL09)*




4 EAST ELEVATION
As Proposed, 1:100

*Proposed East Elevation NTS (Refer to 210. PL09)*

*South elevation of Jackdaws Ford as viewed from the south east*

*Deteriorating brickwork at low level of former butcher's shop needing repair/replacement and redecoration*

*Existing shallow pitched roof of former butcher's shop is proposed to be re-roofed with slate with lead roll hips at a slightly steeper pitch and painted cast iron gutters are to be added*

*South elevation of Jackdaws Ford. It is proposed to remove the cement render between the existing timber frame and replace with breathable insulation and lime render over the frame*

*West elevation of the western cross wing of Jackdaw Ford as seen from the south west*

*Existing rainwater pipe on western elevation to be altered and plinth to be repaired*

*Infilled mullion window on first floor to be reopened*

*West elevation of northern range showing the former garage opening in the northern end. The location of the former garage opening is discernable by render cracks between the corner and left-side window and just to the right of the right-side window. The redundant lintel is also visible just below eaves level.*

*Concrete steps to the west elevation where it is proposed to replace with a low-level brick retaining wall and evergreen hedge*

*North elevation showing area od cement render to be removed and replaced with lime render*

*North gable end (in foreground), where a new lean-to for a Larder & Plant Room is proposed*

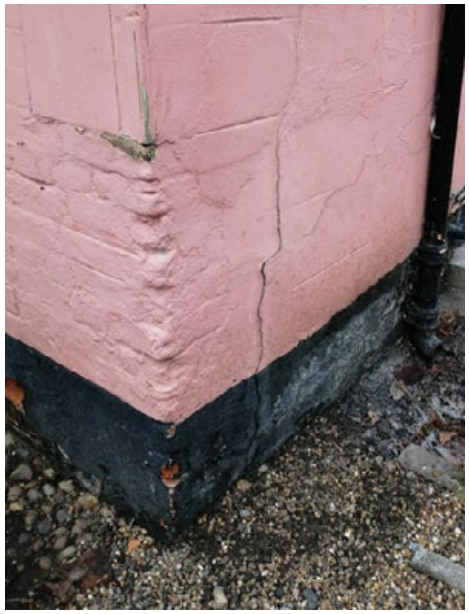
*Detail of cracked render on east side of former butcher's shop*

*Detail of deteriorating brickwork in need of repair on south side of former butcher's shop*

*Detail of cracked render on north elevation*

*Detail of cement render infill panel coming away on south elevation of western cross wing*

*Southern end of the east elevation of Jackdaws Ford as seen from the street in the east*



*South east corner of former butcher's shop where render over brickwork is deteriorating*

*Southern end of east elevation showing deteriorating render and leaking shallow pitch roof with concrete hip tiles and eaves without gutters*

*East elevation of Jackdaws Ford looking north at the southern end of the northern wing where it is proposed to introduce a small squint window for a new bedroom in the currently unused attic space*

*East elevation of Jackdaws Ford looking south towards the street showing rooflights to be removed. The Peackock Inn pub is on the left.*

Ground Floor - proposed changes in detail

1). Snug: Replace existing carpet with new oak floorboards. Add internal secondary glazing to existing south elevation window.

2). Lobby: Replace modern floor tiles with new oak floorboards.

3). Cupboard: Stairs removed, rebuild wall to include reuse of existing door leaf to match DG03. Add carpet over existing concrete floor.

4). Drawing Room: Stairs removed, rebuild wall to include reuse of existing door leaf to match DG03. Replace ex'g carpet with new oak floorboards. Add internal secondary glazing to existing windows.

5). Study: Remove appliances/plumbing for existing kitchen. Add breathable woodfibre internal wall insulation and lime plaster to external wall, radiators, and fitted joinery. Replace modern floor tiles with new oak floorboards. Add internal secondary glazing to existing windows.

6). Corridor: No changes

7). WC & Boots: Add partition wall. In WC, add radiator, sanitaryware, and studwork walls for plumbing voids. Replace windows WG16 & WG17 and external door DG07.

8). Back Hall: Remove ex'g ceiling, modern studwork walls, and plasterboard finishes. Add breathable woodfibre internal wall insulation and lime plaster to external wall. Add stairs/cupboard and replace radiator. Replace WG09, using existing brick opening. Brick floor to be taken up and relaid following installation of underground services and new insulated floor. Insulate roof between and below existing rafters and add 1no. conservation rooflight.

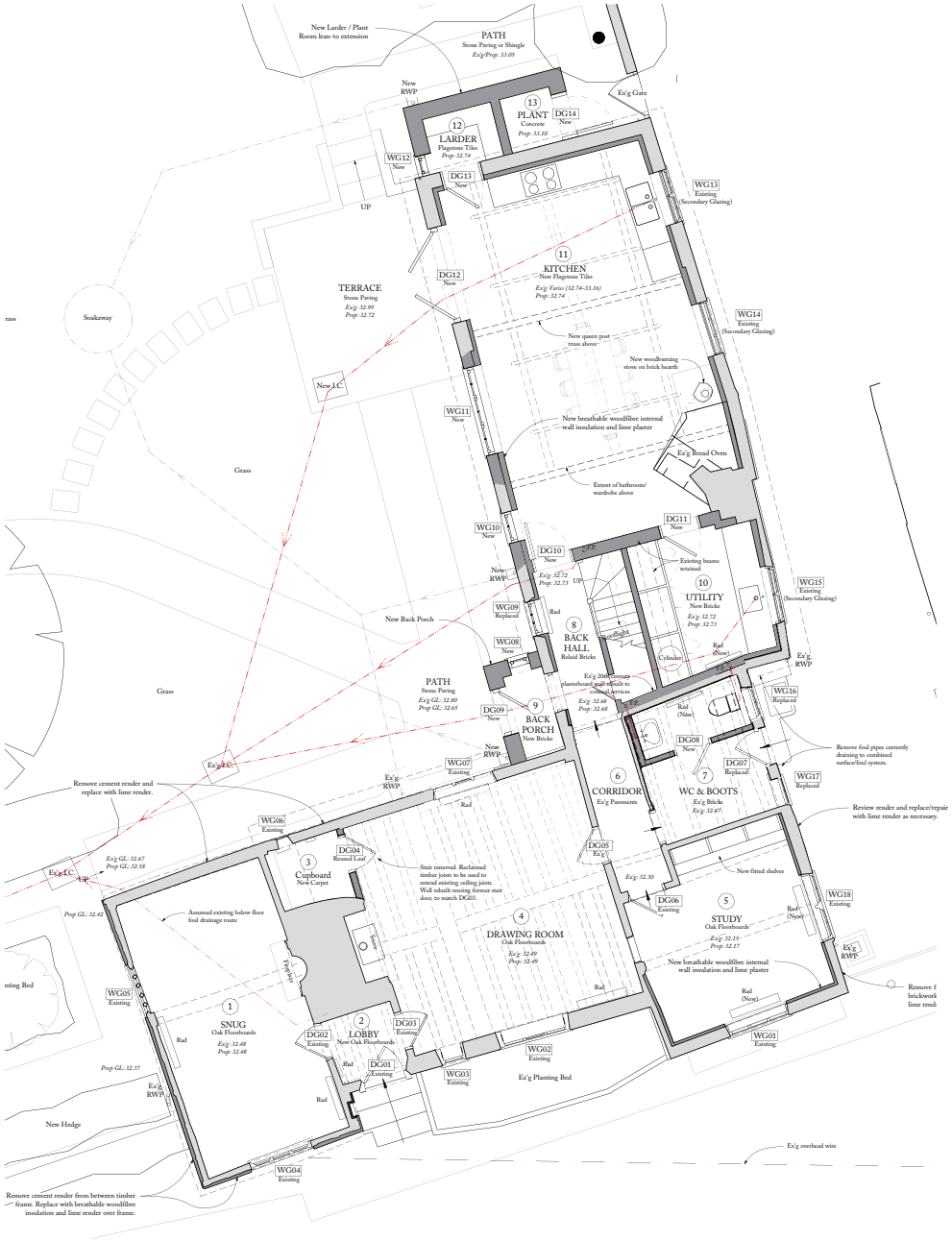
9). Back Porch (New): Cavity wall construction with rendered exterior. Flat lead roof with painted cast iron gutter. New half-glazed door and window. Brick floor over new insulated floor build-up.

10). Utility Room: Remove existing modern studwork walls and plasterboard finishes, including plasterboard on south wall. Build new partition walls, including the furred-out south wall to conceal new services. Add breathable woodfibre internal wall insulation and lime plaster to external wall. Replace ex'g vinyl floor with new brick floor over new insulated floor build-up. Add radiator, sink, appliances. Retain existing airbricks for background ventilation behind new joinery and replace extract fan within existing opening. Plumbing re-routed below ground to join foul run to west of house. Add fitted joinery with hot water cylinder. Add internal secondary glazing to existing window.

11). Kitchen: Retain existing external brick/blockwork walls and roof, while removing internal blockwork partition wall. Modify floor levels to match level of existing lower area throughout and install new flagstone floor tiles over insulated floor build-up. Modify roof structure to include queen post truss in place of former blockwork partition wall, to replace eaves-level steel tie bars with timber ties at purlin level, and to remove 2no. rooflights. Add breathable woodfibre internal wall insulation with lime plaster to external walls. On west wall, modify openings, including to remove 20th century "eyebrow door" and sash windows and replace with casement windows and French doors (French door in place of former garage door opening). On east elevation, add internal secondary glazing to existing windows. Add woodburning stove near former (non-functioning) bread oven with brick hearth.

12). Larder (New): Cavity wall construction with rendered exterior. Slate roof with black plastic gutter. Flagstone tile floor over insulated floor build-up.

13). Plant Room (New): Cavity wall construction with rendered exterior. Slate roof with black plastic gutter. Concrete floor. Add boiler, and include both kitchen extract and boiler extract through roof. New insulated boarded door



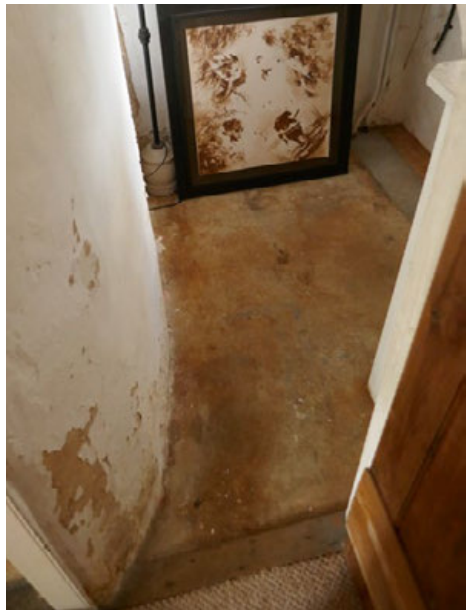

*Proposed Ground Floor Plan - NTS (Refer to 210. PL07)*

*Southern end of east elevation showing back door and window grouping to be replaced and existing exposed foul drainage pipes to be removed*

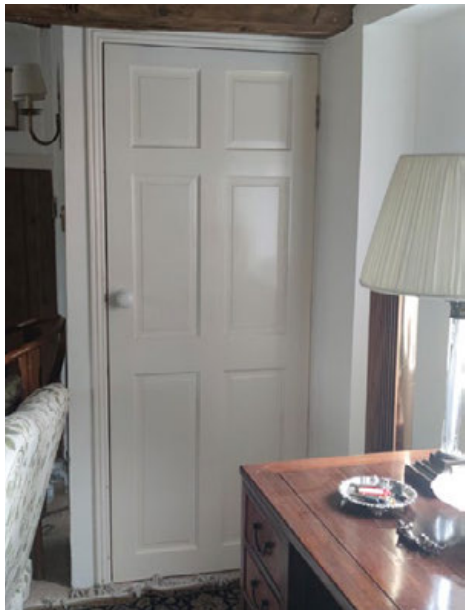
*Proposed sketch showing modified back door and window grouping, decluttered pipework, and improved roof with gutter on the former butcher's shop*

*1 Snug - Replace carpet with oak floorboards laid over existing concrete floor*

*2 Lobby - Modern floor tiles to be removed and replaced with oak floorboards*

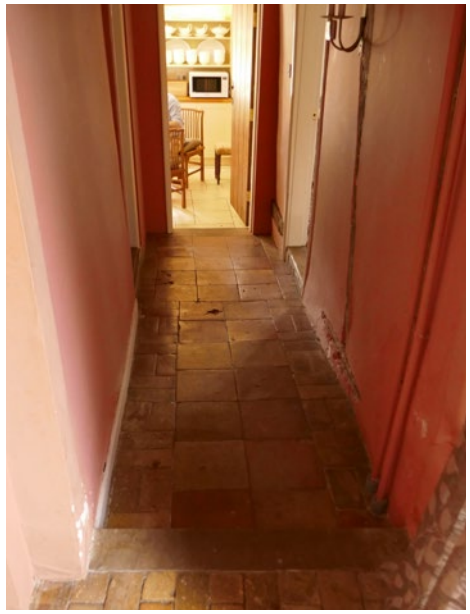


*3 Cupboard - New carpet to be installed over existing concrete floor*



*4 Drawing Room - Existing door leaf to be reinstalled following removal of stairs*

*5 Study - Appliances, modern floor tiles, and plumbing within current kitchen to be removed. Install breathable woodfibre internal wall insulation with lime plaster, new radiators, and oak floorboards.*



*6 Corridor – No changes proposed to corridor*

*7 WC & Boots – External door to be replaced and floor bricks to be retained*

*7 WC & Boots– External door and window to be replaced in adjusted window opening*

*8 Back Hall – Plasterboard partition walls and internal doors to be removed and floor bricks taken up and relaid over new insulated floor buildup*

*9 Back Porch – Area of proposed new Back Porch. Existing door opening to be retained.*

*10 Utility - Partition walls, floor and wall tiles, and sanitaryware to be removed.*

*10 Utility - Vinyl flooring and sink to be removed. Window to be retained and secondary glazing added. Install breathable woodfibre internal wall insulation with lime plaster to external walls.*

*10 Utility - Existing spine beam to be retained. Plasterboard finishes and partition walls to be removed.*

*11 Kitchen - Modern softwood rafters in roofspace above current ceiling. Blockwork partition wall in location of former garage is visible at back.*

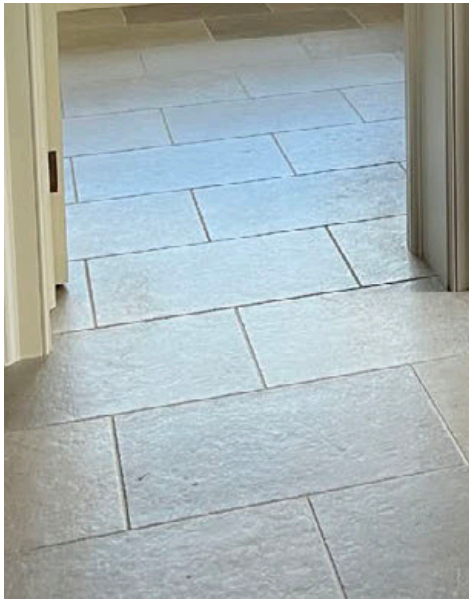
*11 Kitchen - Remove existing stepped-level floor and replace with new insulated floor on single level and flagstone floor tiles. Existing bread oven (on right) to be retained.*

*11 Kitchen - Steel tie bars, rooflights, ceiling, and blockwork partition wall (left hand side) to be removed. A queen post truss is to be installed in place of the blockwork partition wall.*

*12 & 13 Larder & Plant Room - Proposed location of new Larder and Plant Room*

*Existing bricks to be set aside and relaid in Back Hall. New bricks proposed for new Back Porch and Utility Room are to be selected to be similar.*

*Proposed oak floorboards with cut nails for Snug, Lobby, Drawing Room, and Study. (Photo shows new oak board placed above oak boards laid 15 years ago, which have naturally darkened over time).*



*Proposed flagstone floor tiles for Kitchen and Larder*

First Floor - proposed changes in detail

14). Bedroom 1: Reopen mullion window WF05. Reopen fireplace, retaining existing surround and install slate hearth and wood-burning stove. Move radiator. Replace carpet. Add internal secondary glazing to existing north and south elevation windows.

15). Wardrobe: Some adjustments to plumbing runs for Bath 1, reusing existing cast iron soil stack. Replace carpet.

16). Bedroom Lobby: New floor where stairs removed with new carpet, and extend steps up to Bedroom 1 to improve safety. Remove 20th century partition wall and build new partitions as shown. Add new radiator. Add internal doors DF03 and DF04. Add internal secondary glazing to existing window.

17). Bath 1: Replace sanitaryware, including removal of bath and installation of shower. Add boarded sliding door DF03, installed within new partition wall. Replace vinyl sheet flooring with tiles. Add internal secondary glazing to existing window.

18). Upper Corridor: Remove 20th century partition wall and build new partition as shown. Remove dropped ceiling to allow taller, sloping ceiling. Replace carpet. Add internal secondary glazing to existing window.

19). Bedroom 2: Remove 20th century partition wall and build new partition as shown. Door leaf DF05 resused, but installed within new wall. Replace carpet. Add internal secondary glazing to existing window.

20). FF Lobby: Former cupboard removed and lobby and steps extended. Remove 20th century partition walls and extend Lobby into former bathroom space. Reopen blocked opening to new Stair Landing. Replace carpet.

21). Bedroom 3: Move door leaf DF06 to new opening in new partition wall to create small Lobby space and wardrobe area for Bedroom 3, while retaining existing door opening. Add fitted joinery for wardrobe and shelves. Replace carpet. Add internal secondary glazing to existing window.

22). Bath 2: Remove 20th century cylinder cupboard and 20th century partition wall on west side of bathroom. Build new partition as shown, and install reused door leaf DF07. Add studwork framing to exterior wall with breathable insulation between studs and space for plumbing runs. Remove previous external plumbing stacks/pipes and reroute to new drops. Install new shower, (foul drop to be between existing joists to new drop location). Replace sanitaryware. Replace vinyl sheet flooring with tile. Add internal secondary glazing to existing window.

23). Bedroom 4: Retain existing floor structure and floorboards. (Note that additional plywood structure within floor build-up may be necessary to stiffen floor as noted in engineer's comments, to be confirmed by engineer). Install carpet. Add breathable insulation between studs of exterior walls, build new ashlar wall, add new egress conservation rooflight (trimming modern softwood rafters). Install new partition walls and door. Add small window WF09 and background vent with cast iron airbrick below window.

24). Bath 3 + Wardrobe: Add new room including floor joists, sanitaryware, partition walls, doors, and conservation rooflight.

25). Staircase Landing: New staircase to be formed, as described with ground floor


*Proposed First Floor & Roof Plans - NTS (Refer to 210. PL08)*

*14 Bedroom 1- Blocked mullion window to be reopened*

*14 Bedroom 1 - Existing fireplace surround*

*14 Bedroom 1 - Proposed sketch of reopened fireplace with wood-burning stove*

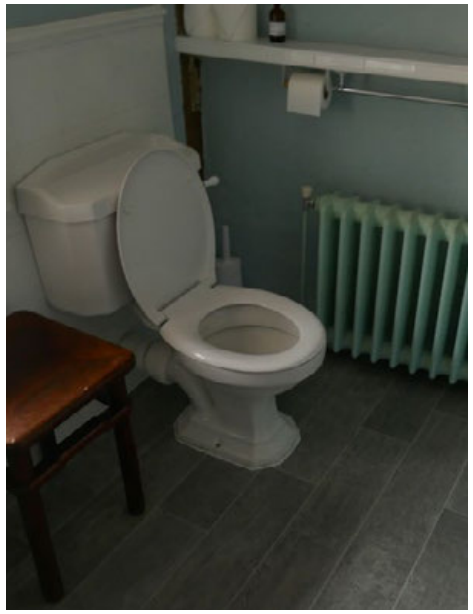
*16 Bedroom Lobby - Area of proposed Bedroom Lobby showing awkward head height and unsafe landing in front of bedroom, along with late 20th century balusters and handrail to be removed*

*17 Bath 1 - Sanitaryware within Bath 1 to be replaced, including replacement of bath with shower. Existing vinyl floor to be replaced with tiles.*

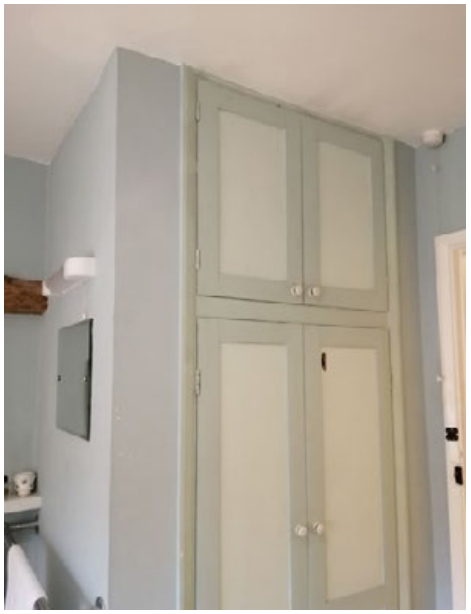
*16 & 18 Bedroom Lobby & Upper Corridor- Existing 20th century studwork partition to be replaced in modified location and existing dropped ceiling to be removed*

*19 Bedroom 2 - 20th century partition to be replaced in modified location. Door leaf to be moved to new opening in rebuilt partition wall.*

*20 FF Lobby - Cupboard to be removed and steps extended. Lobby expanded into previous bathroom space and new stud partitions built as per proposed plan. Existing bathroom door (in image on right) to be moved to new opening in rebuilt partition wall.*

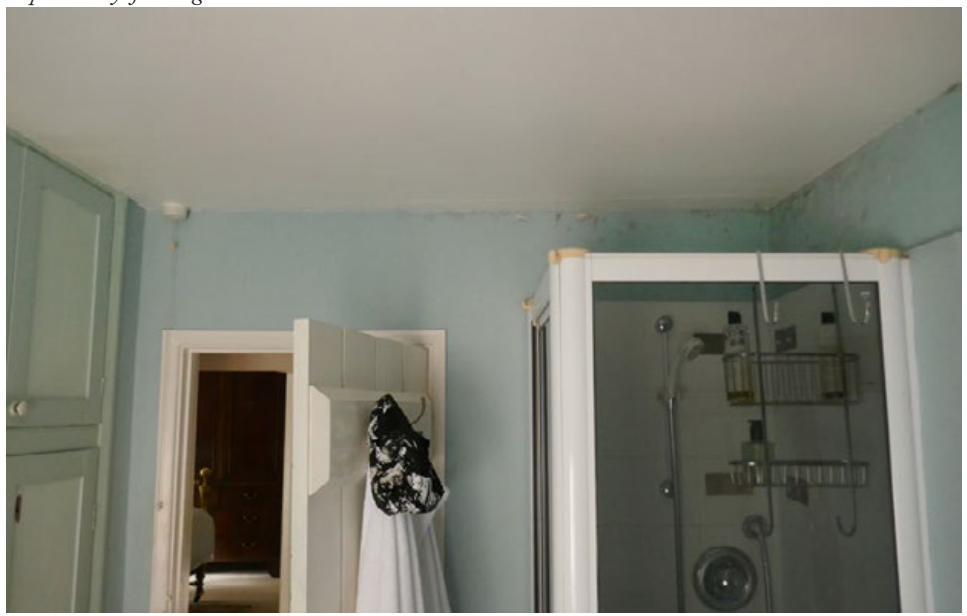


*22 Bath 2 - Replace sanitaryware and radiator. Replace vinyl flooring with tiles.*



*22 Bath 2 - Cupboard to be removed*

*22 Bedroom 3 - Existing door leaf to be moved to new location, as shown in plan*



*22 Bath 2 - Sanitaryware to be replaced including shower. 20th Century partition wall to be rebuilt in modified location. Existing door leaf to be moved to new opening in rebuilt wall.*

*23 & 24 Stair & Bedroom 4 - View of 21st century partition wall and roof structure on north side of proposed new stair and Bedroom 4*

## Structural Engineering

The Morton Partnership have been engaged to provide guidance and commentary on the structural engineering implications of the proposed works, particularly in relation to the historic fabric of Jackdaws Ford. In that regard, Ed Morton visited Jackdaws Ford and has reviewed the proposed plans, elevations, and sections.

The principal structural alterations relate to north range of the house, which is thought to be 19th century in origin, but has been much altered in the 20th century with floors, walls, and roof all heavily rebuilt or altered.

The roof structure of the north range comprises new softwood rafters, 100x50mm at 410 centres spanning from eaves to ridge but with intermediate support provided by 155mm deep x 50mm wide purlins, which are then supported on collars cut to clasp this and situated on every third or fourth rafter pair.

Within the north range in the area of the proposed Kitchen, the space is open from floor to the underside of the collars supporting the purlins, and then with additional ceiling joists spanning between the rafters at this level to form a flat level ceiling soffit.

Within the north range in the area of the proposed Utility Room / Bedroom 4 – adjacent to the older part of the house - there is a softwood first floor, which can be seen to comprise a spine beam with joists tenoned into this and extending to the external walls, which is supported on a cross beam at the junction to the Kitchen area. Both the exiting spine beam and cross beam in this area are proposed to be retained, along with many of the joists.

The following items summarise The Morton Partnership's suggested structural alterations.

**Existing Floor to proposed Bedroom 4:**
*Clearly the floor was in use historically as the joists are all boarded, but in lifting the floorboards the joists were noted to be modest in section at 110x75mm at quite wide centres between 470 & 500mm. These will be checked in detail, but it may be necessary to stiffen these by using plywood over. Floorboards could be lifted and re-set over where usable.*

*Where the stair is proposed the floor joists will be removed, and thus lateral restraint to the external wall must be considered. At present the floor joists sit slightly below the eaves plate so do not provide a direct tying action, however, they may contribute.*

*The options we will consider for this are stiffening the modern eaves plate along its length, so it spans more readily between the tie positions at either end, as well as strengthening the purlin and/or common rafters so they are stiffer and less likely to thrust outwards. Of course, the new back porch will be useful as will act as a buttress and help to resist roof spread as well.*

**Collars to be removed which currently support purlins at proposed Bedroom 4 & Stair Hall:**
*Here we intend to strengthen the purlins and/or the rafters, both of which are modern. As a studwork ashlar wall has been included to Bedroom 4 which reduces the span of the rafter a little, this may avoid the need for strengthening the rafters/purlins which will be subject to a detailed check.*

*To the south end the purlins do rest on the historic timber frame but the increase in load is nominal and we do not have any concerns in relation to this.*

*At the north end we suggest the new wall sub-dividing this space (proposed Bedroom 4 / Stair Hall) from the open section (proposed Bath 3), and bearing directly over the historic main beam, is formed as a plywood faced partition and thus able to distribute load. In addition, the wall below the cross beam should be stiffened in a similar way.*

**New First Floor for proposed Bath 3 & Wardrobe:**
*This section of floor will require either a concealed truss spanning across or possible a ply faced diaphragm wall spanning between the external walls. The first-floor joists can then span between this truss and the north wall of proposed Bedroom 4 / Stair Hall (as identified in the item above) and have been allowed at 150mm deep which should be acceptable.*

**New open section in proposed Kitchen / Sitting with added Roof Truss:**
*The new Queen Post Truss will span across the width of the building and will provide support to the purlin. Collars will need to be retained on every fourth rafter pair and cut to clasp the existing purlins to provide them with support.*

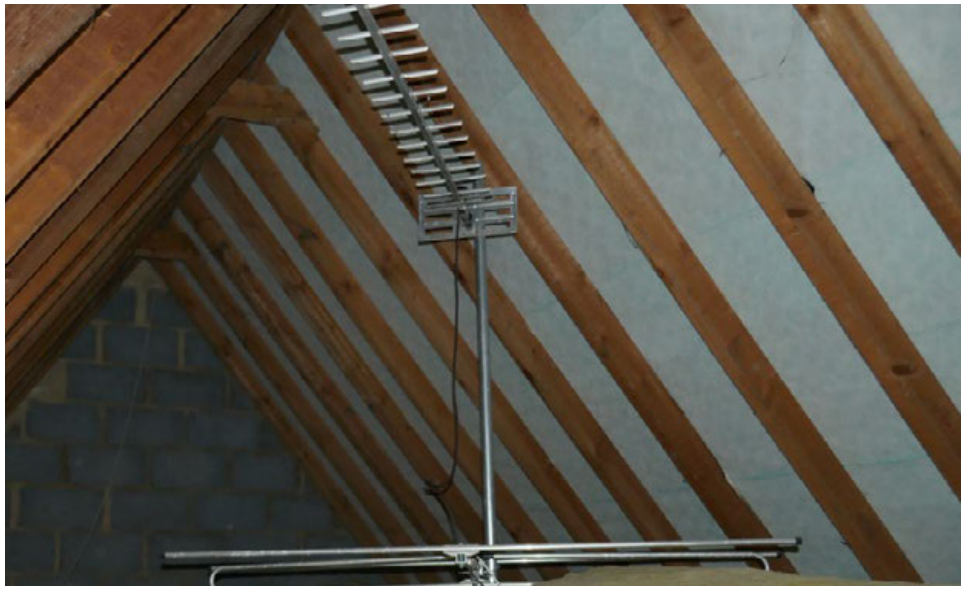
**Re-fenestration of the West Wall of the North Range:**
*New openings and alterations are proposed, but all restricted to more recent fabric. New lintels will be required, including the longer spans.*

**New Rooflights:**
*Where new rooflights are proposed the rafters either side will require doubling up to support the trimmers top and bottom.*

**Exposed Timber Frame:**
*Exposed timber frames are always more vulnerable to water ingress and associated decay to the frame. This is aggravated where inappropriate and non-breathable materials are used. With the cement-based infill panels removed, the condition of the frame can be better assessed, and appropriate conservation repairs undertaken.*

*This may include face repairs to timbers affected by loss of surface and cleaning off the underside of the soleplate and driving slate in to 'harden up the support' and improve breathability by using the slate on an 'hit and miss' basis. Hopefully the soleplate will not require replacing but if badly decayed new oak length will be inserted with half lap joints. If principal posts are decayed at the base, which seems unlikely based on an initial inspection, we would expect a scarf joint to replace the decayed joint. Where stud feet are decayed new partner timbers can be added alongside to allow retention of historic fabric.*

*Interior of proposed Kitchen showing steel tie bars and rooflights to be removed. The new Queen Post Truss is to be in the location of wall on the left, and the flat ceiling is the location of collars to be retained.*



*View of roofspace above the proposed Kitchen showing modern softwood rafters to be modified for rooflight trimming. The blockwork partition wall to be removed is visible at back of photo.*

**Energy and Insulation**

It is intended to improve insulation at Jackdaws Ford with the aim of improving the energy performance, where it is feasible to do so without causing harm to the historic fabric of the listed building.

The proposed reintroduction of lime render over 40mm thick breathable woodfibre board insulation to the exposed timber frame on the south and west sides of the house will improve the insulation values of the walls being overclad. These proposed works also have the benefits of returning the house to its late 19th century appearance and improving the expected longevity of the building.

The addition of breathable woodfibre board internal wall insulation to the solid masonry external walls of the proposed Study and throughout the north range, along with adding insulation below the rafters in the north range, will significantly improve the thermal performance of these areas. There are no cornices or other significant features internally which would prevent this. The north wing is also to receive a new insulated floor build-up.

New glazing (except for the reopened mullion window in Bedroom 1) is to be conservation grade thin-sealed units within painted timber joinery, allowing for traditional width glazing bars and sightlines, but providing good insulation values; the proposed detail is as has been approved for use on other listed buildings in East Anglia, and nationally has been successfully used by the architects in alterations including to to Grade I listed buildings.

The retained existing windows are to receive internal secondary glazing, which will reduce air leakage and conducted heat losses while allowing the original windows to be retained unaltered.

It is hoped that the improvements to the energy performance at Jackdaws Ford described above may make it feasible to replace the house's oil boiler with a heat pump at some point in the future, but this is not included in the current application.

*Image showing breathable woodfibre internal wall insulation and lime render, as approved by Historic England in a Grade I listed building in Lincolnshire*

*Image showing limewash and lime render finish over external breathable woodfibre insulation on a Grade II listed timber framed building in Suffolk*

## Conclusion

Jackdaws Ford has changed many times during its first 500 years.

The changes now proposed have been considered with sensitivity and considerable care about what is most important in the building and which areas are most capable of improvement; the changes will form another phase in the slow evolution of the building in response to the differing circumstances and priorities of every generation, and the result will be a house newly repaired and made more practical and comfortable for at least another generation to enjoy.

## Appendix

**Listing Description:**

*- List Entry Name: Jackdaws Ford*

*- Address: Chelsworth The Street 1. 5377 (north side) Nos 30 and 32 ( Jackdaws Ford)*

*- Listing NGR: TL9820848027*

*- Grade: II*

*- List Entry Number: 1194140*

*- Date Listed: 23-January-1958*

*- Description: C15-C16 timber-framed and plastered building with a cross wing at the west end with exposed timber-framing. Two storeys. The main block is partly faced in brick (painted). At the east end there is a small former shop front built out on the front, with exposed timber framing above. Casement windows. On the west side there are some original windows (one blocked) with moulded mullions. Roof tiled, with a large central chimney stack. A wing extends to the north at the east end.*