



Initial Heritage Impact Assessment No. 111 Frognal, London NW3 6XR March 2021



Initial Heritage Impact Assessment No. 111 Frognal, London NW3 6XR March 2021

# 1 Introduction

1.1 This Heritage Impact Assessment has been prepared to consider the unauthorised works to No.111 Frognal, London, NW3 6XR (hereby known as the site). This report summarises the significance of the site and considers the impact of the works against relevant historic environment policy having regard for listed building consent dated 3<sup>rd</sup> March 2020 (ref: 2019/6100/L.

1.2 The purpose of this appraisal is to consider the effect of the unauthorised alterations on the special architectural character and historic intertest of the listed building, having specific regard to all other works and the associated listed building consent and the relevant national and local policy framework.

1.3 The reason for carrying out the works are clearly set out in documents already provided to the Council from the owners of the property and their structural engineer. Whilst an important element in the overall assessment of the works, these reasons are not repeated here.

1.4 The following statement should be read in conjunction with:

- Section 19 (Planning (Listed Buildings and Conservation Areas) Act 1990) application for the variation of condition 2 of the Listed Building Consent 2019/6100/L;
- Documents submitted in relation to works to the cellar including letter addressed to Nick Baxter dated 28 January 2021;
- The PCN response from the owners dated 19 February 2021;
- Photographic schedule and marked up existing plans showing consented works sent to the Council on the 8 March 2021.

#### **Report Structure**

1.5 The report is divided into two main sections. The first (section 2) describes the historic development of the site including any relevant planning history and outlined its significance. Section 3 summaries the works to the cellar and considers the effect of these alterations on the special architectural character and historic interest of the listed building. Section 4 summaries the Section 19 works and considers the effect of alterations on the special architectural character and historic interest of the listed building. Section 5 considers additional matters.



Initial Heritage Impact Assessment No. 111 Frognal, London NW3 6XR March 2021

# 2 The Site

2.1 This section describes the historic development of the site including the relevant planning history as well as setting out its significance.

### Historic Development

2.2 No. 111 Frognal is a grade II\* listed dwelling on two floors including a subterranean a cellar which is located under the southern part of the dwelling. It is one of 4 adjacent properties comprising former house with stable block and gardeners cottage, now 4 semi-detached houses, listed as a group (nos.105-111 Frognal (odd) in 1950 for their architectural and historic interest and the group value. The site is within Hampstead Conservation Area.

2.3 Frognal Grove was a country house built by Henry Flitcroft in 1750. The estate, including the main manor house, outbuildings and gardens, was sold for conversion in 1953. Three dwellings were formed from the main house and a fourth from the stables and gardener's cottage (the site). A fifth was formed from the lodge. Five other building plots were made available for development at the time of sale in 1950s.

#### 2.4 The stable block & Gardeners cottage

An original stable block was built by Flitcroft in the 18<sup>th</sup> century. This was largely rebuilt and extended to the north in the mid/late 19<sup>th</sup> century by GE Street (to include the north transept and gardeners cottage). The list description states the stable block is 'possibly late 19th century.' The extent of survival of 18<sup>th</sup> century fabric is unknown.

2.5 As part of the 1950s separation of the estate, the stable block was divided in two and its courtyard separated. The southern bay of the stables now forms part of no.109 Frognal which includes part of the stable and the late 19th-century extension of the house. A new boundary wall was erected at the south of the subject site across the stable yard to separate the stable yard at no.109 and no. 111. We understand a cellar exists beneath the southern bay of the former stable block and that this comprises habitable accommodation.

2.6 No.111 Frognal comprises the former cottage (northern range) and the northern part of the stable block which contains two pedimented gabled bays (southern and northern transepts) either side of the central range. The site was bought by Anthony and Sheila Caro in the late 1950s. The Caros converted the stables and gardeners cottage into residential accommodation.

2.7 The rear and the interior of the building were substantially altered from its mid 19<sup>th</sup> century configuration in the 1950/60s with little original fabric remaining apart from the front elevation. The works included;

- Replacement of the roof;\*
- Replacement of all internal floors;\*
- Erection of a two storey rear extension;
- Removal of the original lower ground floor floor;
- Raising ground floor level with timber suspended floor; \*
- The removal and replacement of the majority of the rear elevation; \*
- Excavation of a trench along the rear at lower ground level,
- Replacing of the stable doors and all windows;



Initial Heritage Impact Assessment No. 111 Frognal, London NW3 6XR March 2021

- Erection of a UPVC conservatory to the rear;
- The front elevation brickwork was painted;
- Cementitious render to the rear façade.

\* The full extent of the works carried out in the 1950 and 1960s by the Caro's was unknown until work commenced on site in September 2020. This is has been documented and the photographic evidence provided to the Council on 8 March.

2.8 The current owners bought the property and moved into the property in October 2017. They began pre-application discussions with the Council in November 2017.

2.9 The remedial works to the cellar took place in the third Quarter of 2018 whilst the family were living in the house. This included lowering the ground floor level to its original position. All existing and proposed plans submitted to the Council showed the ground floor level had been lowered following the works to the cellar.

2.10 Application for planning permission and listed building consent was registered on 6 December 2019 and granted on the 3 March 2020 (ref: 2019/6089/P / 2019/6100/L) for 'demolition of non-original extensions including rear box back extension, uPVC greenhouse and boiler house; excavation of rear garden and erection of basement room beneath garden; erection of single storey rear extension at upper ground level and reinstatement of historic sloping roof, rear dormer and gable; replacement front dormer windows; internal and external refurbishment including removal of non-original partition walls and staircase, alterations to front and rear fenestration and reinstatement of timber stable doors.'

2.11 The planning permission was subject to conditions. Three of these conditions were precommencement (condition 4 – certification of qualified chartered engineer; condition 5 - details of the design of building foundations and; 6 – tree protection measures.) These conditions were submitted to the Council for discharge on 20 July 2020 and approved on 5 August 2020 (ref: 2020/3181/P).

2.12 The listed building consent contained 5 conditions none of which were pre-commencement.

2.13 Works commenced on site in September 2020.

In January 2021 the owners of the site stopped works and contacted the Council in connection with the remedials works which have taken place to the cellar and submission of the section 19 application. The application seeks variation to condition 2 (approved drawings) of the listed building consent (2019/6100/L). The application is partially retrospective. The application is linked to a corresponding section 73 application. The applications are identical. The applications were submitted on 29<sup>th</sup> January 2021. We understand the applications are yet to be registered.

#### **Outline of Special interest**

2.14 Architecturally the contribution made by the building is limited to the front elevation; given the subsequent phases of alterations which has removed any features or fabric internally and largely disfigured the rear façade. There is no remnant of the former uses of the building internally. The pre-existing cellar was filled with rubble and therefore could not contribute to the architectural character of the building. The recent phase of the works to the building by the Smithson's add little or no value to the architecturally interest of the building despite recognition of their work elsewhere.



Initial Heritage Impact Assessment No. 111 Frognal, London NW3 6XR March 2021

The key architectural interest is therefore:

- Legibility of the original facade composition to the front façade only;
- Original features to the front façade only;
- The relationship of the building relative to the principal house as the ancillary stable block;
- Understanding of the building as former stable block including single room deep plan (between the transepts only); stable door openings, and;
- Hierarchy of the rooms reflecting the original single storey stable with hay loft above.

2.15 The building has a greater historical interest as part of interesting key phases in the life of the building from its original use as a stable, to ancillary garage and cottage as part of a larger estate and more recently the home to internally renowned British sculptor. The key historic interest is therefore;

- Historic relationship as part of Frognal Grove
- Association with Henry Flitcroft;
- Association with GE Street;
- Association with Anthony Caro.



Initial Heritage Impact Assessment No. 111 Frognal, London NW3 6XR March 2021

# 3 The Cellar Works

3.1 This section will summarises the works and consider the effect of the alterations on the special architectural character and historic intertest of the listed building.

3.2 Listed building consent is required for the carrying out of any works for the alteration or extension of a listed building in a manner which would effect its 'character as a building of special architectural or historic interest.' In considering the character of "the building" as one of special interest what is at issue in this case is the character of the whole building. The listed building in this instance includes Nos.105-111 (Odd) Frognal Grove including former stable range.

## Cellar Works

3.3 Remedial works to the existing cellar were carried out and completed in the third quarter of 2018. The works to the cellar included:

- 1. Replacement of the pre-existing timber suspended floor with new beam and block ground floor finished with screed;
- 2. Removal of back filled earth from the cellar;
- 3. New reinforced concrete lined walls cast directly against the brickwork cellar walls;
- 4. Installation of a physical damp proof membrane with associated sump and pump;
- 5. Timber stud and plasterboard lining to the inner walls of the cellar;
- 6. New reinforced concrete basement floor;
- 7. Doorway opening in internal cellar wall dividing north and south cellar rooms;

3.4 The 'as-built' works constitute alterations and not demolition of the listed building.

3.5 These works have been completed and are referred to as 'as-built.' The works did not benefit from listed building consent. Each element of the work and its impact is set out below:

# 1. Replacement of the pre-existing timber suspended floor with new beam and block ground floor finished with screed;

3.6 The former stable block and garage would have unquestionably had a solid floor with level access from the courtyard. The pre-existing ground floor comprised modern pine floor boards over modern suspended timber joists. The floor level was raised approximately 400mm above the courtyard level, accessed by two sets of concrete steps. This floor covered the south transept, central range and north transept.

3.7 The 'pre-existing' work was carried out between 1950 and 1955 (Appendix C). It is unclear if it had consent (the building was listed in 1950). The works resulted in the inability to access the building due to inappropriate strength of the materials used (not possible to drive over the timber suspended floor with a vehicle of any kind) and the change in level, dramatically and fundamentally harmed the character and understanding of the building's former use as a stable.

3.8 The 'as-built' works did not result in any loss of historic fabric of interest.



Initial Heritage Impact Assessment No. 111 Frognal, London NW3 6XR March 2021

3.9 The 'as-built' works reinstated the original ground level to the stable block and reinstated a solid floor, creating a more authentic character or at least an appearance more redolent of its original use (in conjunction with the works to replace and lower the stable doors and removal of the concrete steps on the front elevation approved as part of the 8 March 2020 scheme). These works are a significant heritage benefit and would without doubt be welcomed and are authorised by the Local Planning Authority.

3.10 Consequently, the works do not conflict with the duty in the Listed building and Conservation Area Act (1990) to have special regard to the desirability of preserving the building or any features of special architectural or historic interest which it possesses.

3.11 If the LB Camden sought to issue a notice to reverse all or part of the cellar works, these would require the complete removal of the 'as-built' floor in order to access the works carried out below. The Courts have confirmed that an enforcement notice cannot be used to secure an improvement to a listed building prior to the carrying out of the unauthorised works (per Woolf J Bath City Council v Secretary of State for the Environment (1984) 47 P.&C.R. 663). In this respect the ground floor could only be reinstated to its former 'pre-existing' state as a raised timber suspended floor thereby eliminating the heritage gain which flows from this element of the works.

## 2. Removal of back filled earth from the cellar

Prior to 2017 the cellar, which was loosely backfilled with rubble and the cellars had fallen into disrepair. This must have occurred during or before the works relating to the raised timber floor (1950-1955). We understand the rubble provided some lateral restraint to the cellar walls and therefore may have provided some positive structural benefits to this section of the building. However, the rubble infilled the space concealing a former element of the building.

3.13 The 'as-built' works did not result in any loss of historic fabric of interest.

3.14 The space was filled with rubble and therefore could not contribute to the architectural character of the building. Indeed its existence was unknown in recent times. Reinstating the northern cellar space by removing the rubble could therefore only enhance our understanding of the space, but needs to be considered along side the works to secure its structural stability.

#### 3. Reinforced concrete lined walls cast directly against the brickwork cellar walls

3.15 This has not resulted in the loss of historic fabric and works did not disturb the cellar walls which have been retained as part of the works. The 'as-built' concrete walls have been erected inside of the existing walls to provide support as necessary to prevent inward movement of the cellar walls. A qualified structural engineer deemed them necessary to provide a long term structural security of the building and for the heath and safety of the occupants of the dwelling at the time. The walls allow the removal of the backfill rubble to be removed thereby enhancing the space and building as a whole.

3.16 However the lining has been cast directly against the cellar walls. The works are therefore not reversible and, could do more harm to the existing brick work if it removed. Some harm is caused by this but at only a minor level because removal of the works would be structurally unwelcome to the building as a whole.



Initial Heritage Impact Assessment No. 111 Frognal, London NW3 6XR March 2021

# 4. Installation of a physical damp proof membrane with associated sump and pump5. Timber stud and plasterboard lining to the inner walls of the cellar

3.17 It is common practice to approve the dry lining of basement and cellar walls in listed buildings. Conservation best practice typically comprises a physical membrane (Newton 500 or similar) being applied to the walls with a cavity drain and pump installed between the existing walls and membrane to remove water. The walls would then be lined with timber studs and finished with plasterboard and plastered. Notwithstanding the structural necessity for the works there is no reason why the local planning authority (LPA) would not have supported an application of this kind.

3.18 The 'as-built' works used the exact same Newton 500 physical membrane and cavity drain system at the site. This ensures no moisture is trapped inside of the walls or lining and allows the walls to continue to 'breathe' as expected. The finished character of the rooms exactly matches the finished appearance of a typical space where the conservation best practice method outlined above has been used.

3.19 Even if different options to support the cellar walls may have been investigated by LPA as part of a listed building consent application, the outcome would have been almost identical to the 'as-built' solution which:

- Retains the brickwork cellar walls in-situ;
- Allows the walls to continue to 'breathe';
- Removes water from the area with the use of a sump and pump rather then sending it elsewhere;
- Results in a painted plaster finish to the space.

#### 6. New reinforced concrete basement floor

3.20 We understand from the engineers statement there was no 'pre-existing' cellar floor. As such there was no loss of historic fabric from installing a concrete slab to the cellar floor.

3.21 The installation of solid concrete floors to a basement or cellar in listed buildings is extremely common. Had the owners of the site applied to carry out this was upon removal of the rubble from the cellar then the Council would have, with doubt, approved the works. Consequently, the works do not conflict with the duty in the Listed building and Conservation Area Act (1990) to have special regard to the desirability of preserving the building or any features of special architectural or historic interest which it possesses.

#### 7. Doorway opening in internal cellar wall dividing north and south cellar rooms;

3.22 Equally the creation of an opening in the internal cellar wall, allowing the connection between the two spaces, is very unlikely to have caused the LPA concern if applied for as part of a listed building consent application. The work would have resulted in the loss of historic fabric. This could have been 18<sup>th</sup> or 19<sup>th</sup> century masonry. However, the minor loss of fabric does not result in harm upon the character of the listed building as a whole and would have allowed access to the otherwise entirely concealed northern cellar.

3.23 Historically all the cellars would have been accessible, at the very least for maintenance, It is therefore likely there would have been openings in the dividing walls which separate each room. The



Initial Heritage Impact Assessment No. 111 Frognal, London NW3 6XR March 2021

creation of an opening therefore does not impact upon plan form at this level. We can only assume the cellar was blocked from access when its was infilled. Importantly the works as a whole re-establish access to the cellar which was otherwise blocked, infilled and concealed.

3.24 Consequently, the works do not conflict with the duty in the Listed building and Conservation Area Act (1990) to have special regard to the desirability of preserving the building or any features of special architectural or historic interest which it possesses.

### Overall impact of the cellar works

3.25 No harm has been caused from the opening between south and north cellars, the concrete floor slab or dry lining the cellar walls. These constitute neutral changes which do not conflict with the duty in the Listed building and Conservation Area Act 1990 (LBCA) to have special regard to the desirability of preserving the building or any features of special architectural or historic interest which it possesses.

3.26 A minor level of harm has been caused by cast the concrete walls against the brickwork cellar walls. This harm would be at the lower end of less than substantial to the character of the listed building as a whole due to the works not disturbing the pre-existing walls; the installation of a sump and pump to remove any water, and; the unlikely event the works would want to be reversed.

3.27 As set out in the National Planning Policy Framework (the Framework), any harm carries significant weight and consent for the works could only be granted if there were public benefits that outweighed that harm. Clearly the cellars had fallen into disrepair and the benefits of the cellar works include uncovering the cellars and securing the long term structural integrity of the building. A significant heritage benefit also includes reinstating the solid ground floor at the correct height. These are more than sufficient to outweigh the limited harm.

3.28 In this instance the works to the cellar as a whole when considered carefully are unlikely to have been opposed had consent been sought. In addition, it is unrealistic and undesirable to expect the building to be restored to its former state. The works have been carried out to prevent the inward movement of the cellar walls and cast directly against the walls. There is an obvious danger to the structural integrity of the walls and damage to the face of the brick from removing the walls.

3.29 Moreover, the works in respect to the ground floor and cellar could only be reinstated to their former 'pre-existing' state thereby raising a timber suspended floor and infilling the cellar with rubble. This would eliminate the gains which flow from this element of the works. These are compelling circumstances for which it would be unreasonable to take punitive or enforcement action.

3.30 We acknowledge that is at the LPA's complete discretion to serve an enforcement notice. However, given the very unlikely ability to be able to reverse the works, the owners' only option would be to appeal the notice. In our view this would not be expedient for the reasons set out above and we would respectively seek the right to submit an application to retain the works and resolve the issue at a local level as per PINS guidance.



Initial Heritage Impact Assessment No. 111 Frognal, London NW3 6XR March 2021

# 4 Section 19 Works

4.1 This section summarises the works in LBCA Section 19 application which were submitted to LB Camden on 29<sup>th</sup> January 2021. Some of the works have already been carried out. The assessment of the works does not distinguish between works which have commenced and those which have not, unless otherwise stated, but instead will consider the effect of the alterations on the special architectural character and historic interest of the listed building.

4.2 The works are itemised to correspond to the list of amendments on the submitted drawings and associated Planning and Heritage Statement which accompanies the application. The information contained in the corresponding Planning and Heritage Statement is not repeated here and should be read in conjunction with the assessment below.

### Lower ground floor approved extension

- LG1. Shifted position of rearmost retaining walls
- LG2. Proposed use of dead, subterranean void space within rear extension foundation walls for storage, W.C, and bathroom
- LG3. Proposed additional leg of reinforced concrete foundation wall
- LG6. Proposed exposed timber structure and clay tile finish for new ceiling elements

#### LG9 Refinement of garden basement windows

4.3 The works set out below relate to works within or which affect the new lower ground floor level extension at the rear of the dwelling. These works are outside of the building and do not result in the loss of historic fabric. These works are referred to by LB Camden as basement works because they involve partial excavation of the land to the rear of the house.

#### LG1. Shifted position of rearmost retaining walls

4.4 This was approved as part of the discharge of condition 5 of the planning permission. The LPA would have considered the affects on the listed building or its setting under section 66 of the LBCA as part of the application. The condition was approved. Informative one of the decision notice confirms:

"The submitted details are in general accordance with the requirements of policies **D1**, **D2**, A2, A3 and A5 of the London Borough of Camden Local Plan 2017 and policies DH1, DH2, NE2 and BA1 of the Hampstead Neighbourhood Plan 2018" (our emphasis). Policies D1 relates to design and policy D2 relates to heritage.

# LG2. Proposed use of dead, subterranean void space within rear extension foundation walls for storage, W.C, and bathroom

#### LG3. Proposed additional leg of reinforced concrete foundation wall

4.5 The LG2 amendment makes use of the 'void' space created from the approved change in foundations. LG3 makes use of a subsequent change in the foundations which was not previously approved as part of the discharge of condition application approval. This enlarged the approved



Initial Heritage Impact Assessment No. 111 Frognal, London NW3 6XR March 2021

'basement' to give a total floor area of approximately 48sqm GIA, an increase of 22sqm from 25sqm as approved.

4.6 Informative one of the listed building decision notice (2019/6100/L) states;

"The new basement is accessed through a pinch point, so does not interfere with the plan form."

4.7 Informative two of the planning permission decision notice (ref: 2019/6089/P) states:

" In this instance, the basement room would be fairly small in size, and it is considered preferable for the basement to be offset from the main building in heritage terms so that it is differentiated as a new addition and does not affect the historic plan form"

4.8 The proposed basement (in total) measures approximately 7m x 7m with the LG3 element measuring approximately roughly 2m x 2m. The 2017 pre-application enquiry by the owners sought views from officers on a scheme which included excavation of a lower ground floor extension measuring "13.5m x 10.9m, and a depth of 3.4m"<sup>1</sup> a total of 147.5sqm. the formal pre-application response from the Council dated 16 January 2018 (ref: 2017/6572/PRE) confirmed;

"The proposals involve the excavation of a garden room within the rear garden measuring 13.5m x 10.9m, and a depth of 3.4m. The existing garden slopes down towards the rear elevation of the house, so that although a significant amount of earth would need to be excavated, the garden room would sit at the same level as the ground floor of no.111.

**There is no in-principal** [sic] **conservation objection** to a garden basement in this instance providing it is does not physically harm the listed structure and does not alter its spatial hierarchy. Basements in conservation areas and in the setting of listed buildings are usually expected not to have visible manifestations. So, while a small number of perimeter roof lights concealed by planters might be acceptable, confronting the rear of the GII\* historic building with a wall of glazed doors across a courtyard is considered to harm the setting of the listed building".

4.9 The letter outlines harm caused from the "wall of glazing" only and does not identify harm from the scale of the basement outside of the envelope of the historic building. The Section 19 proposals result in a total floor area 67% smaller than that of the 2017 pre-application scheme. All of the proposed 'new' spaces created due to the foundation changes are subterranean in that that they have no natural light and require no more openings in the rear envelope of the listed building than the pre-existing arrangement. It is difficult therefore to understand how the LPA could identify harm to the character of the listed building from this element of the works.

# LG6. Proposed exposed timber structure and clay tile finish for new ceiling elements LG9 Refinement of garden basement windows

4.10 These works relate to minor changes to the new approved fabric outside of the listed building envelope at lower ground floor level. These include the finish to the new ceilings and a very minor alteration to the newly approved windows facing the courtyard which would be picked up in the discharge

<sup>&</sup>lt;sup>1</sup> Pre-application letter from LB Camden dated 16 January 2018 ref: 2017/6572/PRE



Initial Heritage Impact Assessment No. 111 Frognal, London NW3 6XR March 2021

of condition 4a of the listed building consent. The works do not impact on the special character of the listed building.

#### New upper ground floor extension

UG1. New north side wall to approved rear extension positioned inside of the boundary wall instead of bearing directly into boundary wall

UG2. Shifted position of west glazed wall to align with foundation walls and ring beam below

4.11 These works relate to the change in shape of the upper ground floor rear extension. The extension as approved was approximately 4.5m deep x 6.5m wide, with a total area of approximately 29sqm and was attached to the existing garden partywall between nos.111 and 113.

4.12 Due to the foundation changes and tree protection measures approved under application dated 5<sup>th</sup> August 2020 (ref: 2020/3181/P) the shape of the extension has changed.

4.13 The extension is now approximately 5.5m deep x 6m wide. The GIA floor area is 2sqm greater at 32sqm. The extension is no longer fixed to the partywall due to the protection of the adjoining tree but has an independent north (UG1) wall.

4.14 The planning permission decision notice states:

"The proposed **massing increase from the rear extension is minimal**, and the application site sits lower than both adjacent neighbouring properties. The proposed rear extension would project an additional 4.5m compared to the existing rear extension, but would **be largely obscured from views** by the existing brick boundary wall and greenery." (our emphasis).

4.15 The minor change in shape and size of the proposed extension feels proportionate given the limited impact and minimal increase resulting from the approved rear extension which would have the added benefit of not unduly impacting upon the adjoining tree. During the course of the application officers sought revisions to reduce the size of the rear dormer window. No such revisions were sought for the rear extension.

#### Rear Garden/Courtyard

#### LG5. Removal of steps into the garden basement UG3. Proposed planter and railings adjoining garden basement courtyard threshold

4.16 These works relate to the changes to the rear courtyard created in the 1950/60s. The works do not conflict with the duty in the LBCA to have special regard to the desirability of preserving the building or any features of special architectural or historic interest which it possesses. They preserve the character and appearance of the Hampstead Conservation Area.



Initial Heritage Impact Assessment No. 111 Frognal, London NW3 6XR March 2021

#### Front elevation

#### LG10 Additional transoms in north bedroom window on front elevation

4.17 This would amend the design of the new front elevation windows to better match the historic fenestration pattern based of what existed on site previously based on new evidence. The more accurate design would enhance the character of the listed building.

#### Internal works to the listed building

LG7 Amendment of position of north bedroom walls LG8 Refinement of stair design UG5 Shift in approved door position UG7 Small amendment to stair position

4.18 LG7,8 and UG5 and UG7 relate to works to new approved elements of the scheme. There are slight shifts in the position as approved and do not impact upon the floor plan for the building.

LG4. Replacement of 20th century rear wall between two transepts and new wall proposed in the same position with HG Matthews facing brick UG4. Replacement of non original 20th century floor joists UG6 Proposed exposed rafters for new portions of ceiling UG8 Replacement of roof joists north range front roof pitch.\*

\*This work is not outlined in the submitted Section 19 or MMA applications

4.19 LG4, UG4, and UG8 are works which affect existing fabric and are not authorised as part of the listed building consent approval.

4.20 LG4 relates to the central range (between the south and north transept rear wall). The upper floor element of the wall was consented to be removed.

4.21 The lower floor façade has been removed without permission. The age of this wall is unknown. The upper floor façade, and lower floor window and door are modern and consented to be removed.

4.22 The lowest section of wall and door surround steps outward on a different plane than the upper section of wall. It is our educated assumption that this section of wall (except for the head of the door) are historic (Appendix D) and that the remainder of the wall has been rebuilt.

4.23 This 'assumption' if correct would have resulted in minor loss of the historic wall (green hatched area in appendix D). This a very marginal and inconsequential loss of fabric to the character of the listed building as whole.



Initial Heritage Impact Assessment No. 111 Frognal, London NW3 6XR March 2021

4.24 **UG4, UG6 and UG8** works relate to the **replacement of modern 1950/60s fabric**. The age of this fabric may not have been known at the time of the application but the photographic schedule provided to Nick Baxter of the 8 March 2021 provides clear evidence of this following stripping out works.

#### Roof

4.25 The approved documents allowed the replacement of the roof covering (Design and Access Statement page 38).

4.26 The annotation of approved section GG S3.GG Rev.08 allowed for the rebuilding of the front roof pitch. The annotation reads;

"Non Original 1960's sloped roof rebuilt (repaired and insulated)"

The intention of the primary part of the annotation is clear. The wording in brackets is more ambiguous but to our mind relates to the fact that the 'is not currently in a good state of repair and not insulated.'

4.27 There was no associated section through the northern range roof and therefore we cannot faithfully rely on the fact that this had consent to be rebuilt. However the large modern dormer was to be removed and replaced with a smaller dormer in a different position. This wouldn't have allowed the rafters above and below the pre-existing dormer to be kept or these within the space of the new dormer.

#### Upper Ground Floor joists

4.28 The internal walls and rear façade of the northern range (gardeners cottage) had consent to be removed. The modern floor joists were partially supported by modern steel beams and partially on the walls themselves, which had consent to be removed. This resulted in the inevitable removal of the floor joists without the ability to retain them in-situ.

4.29 There was no details of the pre-existing structure requested as part of the application and no conditions which required details of the removal of the fabric or requirements for structural details to be provided (unlike the pre-commencement condition 5 of the planning permission which sought additional information of the detailed of the building foundations in order to protect the trees.)

4.30 The listed building consent decision notice confirms that 2019 scheme was approved partially due to the limited impact resulting from removal of modern fabric stating:

"Internally, the works to the lower ground floor principally entail the removal of 20th-century material, apart from one opening in a 19th-century wall. The internal works to the upper ground floor similarly only affect modern fabric. Two new staircases are cut through modern fabric"

4.31 This statement underlines the LPA's acceptability of removing modern fabric. We would agree. The replacement of modern fabric has no impact on the character of the listed building. There is no justification for withholding permission for the replacement of the modern fabric.

4.32 The case of East Riding of Yorkshire Council v Hobson [2008] EWHC 1003 (Admin) is highly material in this instance. The facts of the unlawful works in that case are as summarised at Appendix E.

4.33 East Riding of Yorkshire Council v Hobson requires the LPA to consider both a stage of removal and dismantling TOGETHER with a stage of replacement or rebuilding. If the rebuilding were to continue



Initial Heritage Impact Assessment No. 111 Frognal, London NW3 6XR March 2021

there would be NO affect on the character of the building from the alterations and subsequently no harm caused or no need for consent to be sought for the works under section 7 of LBCA.

#### Overall impact of the section 19 works

4.34 The works outside of the envelope of the building have no meaningful impact upon the special architectural and historic interest of the building particularly given the 'no in-principle conservation objection' to a lower ground extension 3 times larger.

4.35 The main issues to consider in assessing the section 19 application is the effect of the unauthorised removal of fabric during the course works on site on the special architectural character and historic intertest of the listed building. Except for the *potential* minor removal of a part of the rear façade wall without permission no historic fabric has been removed as part of the works.

4.36 All other fabric removed has been modern and dates from the 1950/60s. A significant amount of modern fabric was consented to be removed and replaced as part of the approved scheme and much of the retained modern fabric could not be retained due to the approved plans.

4.37 East Riding of Yorkshire Council v Hobson requires the LPA to consider both a stage of removal and dismantling TOGETHER with a stage of replacement or rebuilding. If the rebuilding were to continue there would be NO affect on the character of the building from the alterations and subsequently no harm caused or no need for consent to be sought for the works under section 7 of LBCA.



Initial Heritage Impact Assessment No. 111 Frognal, London NW3 6XR March 2021

# 5 Materiality and Heritage Considerations

5.1 Notwithstanding the potential impact of the works set out above, the beneficial approach to the site by the owners is a key element of the works which needs to be weighed in the balance by the LPA but has not been discussed or addressed to date.

5.2 The owners intention and approach to the site has always included the authentic restoration of the historic building for the health of the building fabric and its occupants. The scheme seeks to reinstate the breathable and hygroscopic nature of the listed building by removing unsuitable plastic modern paints and cement renders and walls inserted in the 20th and 21<sup>st</sup> century by the past owners and replacing them with breathable, organic, natural building materials wherever possible.

5.3 The roof build up would include the installation of hempcrete insulation between the rafters held in place by clay 'strock' slips which would be lime washed. The new floors would also be insulated with limecrete above recycled foamed glass aggregate (this was visible during the site visit with Nick Baxter on the 26<sup>th</sup> February 2021).

5.3 In addition to the benefits in terms of conservation credentials and the breathability of these materials they also offer a natural, local, low-carbon-impact route to achieving exceptional thermal performance in the built environment, while ensuring the health and wellbeing of building occupants and producing low- or zero-carbon buildings.

5.4 The public and heritage benefits of the scheme are set in full at Appendix F and have been summarised below:

- Removal of all impervious coatings, cement render and modern paints both inside and out;
- Reinstate breathable and hygroscopic nature of the listed building;
- Reinstate with breathable lime render and lime washes;
- Erection of clay and straw cob blocks bonded using clay mortar for the internal walls (this is also visible from the new walls which have been erected visible during the site visit with Nick Baxter on the 26<sup>th</sup> February 2021).
- Breathable clay plaster will be applied directly to the cob surface;
- The interior surfaces will be finished with clay paint
- The owners are working with in collaboration with Jim Matthews of small scale hand made brick yard H G Matthews to create :

1. Strocks - A structural block of clay rich earth and chopped straw, using a combination of their clay and earth from our site;

- 2. Custom handmade heritage and wood fired glazed bricks for the garden basement
- 3. Custom made clay plaster to use throughout the interior;
- 4. Wood fired traditional and hand made roof tiles on the historic sloped roofs; and
- 5. Natural hempcrete insulation for the all new floors (except cellar and floor above the cellar).

5.5 H G Matthews was established in 1923 specialising in hand made traditional wood fired bricks. The company maintains the traditional skills and Scotch kilns which are fundamentally unchanged in design since Roman times. What makes H G Matthews bricks unique is the clay they are made from. This clay, found only in the Chiltern Hills. There were over fifty independent brick making companies in Buckinghamshire before the Second World War. HG Matthews is now the last remaining works in the county. The approach to the build preserves these woodfired brickworks traditions and skills.



10 Bloomsbury Way, London WC1A 2SL +44 (0)20 3871 2951 www.theheritagepractice.com info@theheritagepractice.com

Initial Heritage Impact Assessment No. 111 Frognal, London NW3 6XR March 2021

# Appendix A

## **Relevant Policy Context**

The following paragraphs briefly set out the range of national and local policy and guidance relevant to the consideration of change in the historic built environment.

# Planning (Listed Buildings and Conservation Areas) Act 1990.

The relevant statutory provision for the historic environment is the Planning (Listed Buildings and Conservation Areas) Act 1990.

Section 7 of Planning (Listed Buildings and Conservation Areas) Act 1990 ("LB Act 1990") prohibits alteration or extension of a listed building "in any manner which would affect its character as a building of special architectural or historic interest", unless authorised by a consent.

**Section 8** (Authorisation of works: listed building consent) of the Act confirms works for the alteration or extension of a listed building are authorised if—

(a)written consent for their execution has been granted by the local planning authority or the Secretary of State; and

(b) they are executed in accordance with the terms of the consent and of any conditions attached to it.

**Section 9** of the Act confirms that if a person contravenes section 7 he shall be guilty of an offence except where:

9(3) (a)that works to the building were urgently necessary in the interests of safety or health or for the preservation of the building; 9(3) (b)that it was not practicable to secure safety or health or, as the case may be, the preservation of the building by works of repair or works for affording temporary support or shelter; 9(3) (c)that the works carried out were limited to the minimum measures immediately necessary; and

9(3) (d)that notice in writing justifying in detail the carrying out of the works was given to the local planning authority as soon as reasonably practicable.

**Section 16** requires the local planning to have have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses.

**Section 19** allows for the variation or discharge of listed building consent conditions.

**Section 38** gives local planning authorities the power to issue listed building enforcement notice where it appears to the local planning authority that work being undertaken involve a contravention of section 7.

Section 44b give the authority to power to issue a temporary stop notice if, having regard to the effect of the works on the character of the building as one of special architectural or historic interest, they consider it is expedient that the works are stopped immediately.

Section 66 confirms the local planning authority has a duty when considering whether to grant planning permission for development which affects a listed building or its setting, to have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses.

Section 72 confirms a local authority shall have regard to the desirability of preserving features of special architectural or historic interest, and in particular, listed buildings.

# The National Planning Policy Framework (2012)

The National Planning Policy Framework (NPPF) was published in February 2019 and sets out



10 Bloomsbury Way, London WC1A 2SL +44 (0)20 3871 2951 www.theheritagepractice.com info@theheritagepractice.com

Initial Heritage Impact Assessment No. 111 Frognal, London NW3 6XR March 2021

the government's approach to dealing with the historic environment. Section 12 of the NPPF deals specifically with this area of policy. Policies relevant in this particular case are as follows.

**Paragraph 189** states that applicants should describe the significance of any heritage assets affected, including any contribution made by their setting. 'The level of detail should be proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance.' A history of the site and its context and a statement of significance are presented in this report at section 2.

**Paragraph 192** is clear that in determining applications, local planning authorities should take account of:

a) the desirability of sustaining and enhancing the significance of heritage assets and putting them to viable uses consistent with their conservation; and c) the desirability of new development making a positive contribution to local character and distinctiveness

**Paragraph 193** sets out that 'when considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset's conservation. The more important the asset, the greater the weight should be. Significance can be harmed or lost through alteration or destruction of the heritage asset or development within its setting. As heritage assets are irreplaceable, any harm or loss should require clear and convincing justification. Substantial harm to or loss of a grade II listed building, park or garden should be exceptional.'

**Paragraph 196** affords developments which lead to less than substantial harm to the significance of a to be weighed against the public benefits of the proposal including, where appropriate, securing its optimum viable use.

Paragraph 200 deals with opportunities for new development within Conservation Areas and

setting of to enhance or better reveal their significance. It states "Proposals that preserve those elements of the setting that make a positive contribution to the asset (or which better reveal its significance) should be treated favourably."

#### London Borough of Camden Local Plan

Camden's Local Plan was adopted in June 2017. The most relevant policy in this case is Policy D2: Heritage.

With regard to Conservation Areas, the policy states that the Council will:

 Require that development within conservation areas preserves or, where possible, enhances the character and appearance of the area.

With regard to Listed Buildings, the policy sets out that the Council will:

• Resist proposals for a change of use or alterations and extensions to a listed building where this would cause harm to the special architectural and historic interest of the building.



10 Bloomsbury Way, London WC1A 2SL +44 (0)20 3871 2951 www.theheritagepractice.com info@theheritagepractice.com

Initial Heritage Impact Assessment No. 111 Frognal, London NW3 6XR March 2021

# APPENDIX B

The listed description reads:

TQ2685NW FROGNAL 798-1/26/531 (West side) 11/08/50 Nos.105-111 (Odd) Frognal Grove including former stable range

GV II\*

Large house with stable block, now 4 semidetached houses. c1745-50. By Henry Flitcroft for himself; much altered with later additions. No. 105 was the south-east range; No.107 the principal block; No.109 largely later C19 work with 1926 extension; No.111 converted stables. Painted brick with slated and tiled roofs. EXTERIOR: No.105: originally 2-storey south-east range, 3rd storey added mid C19 by GE Street who also added a porch and verandah to the west front. No.107: the principal block. Slated hipped mansard roof with dormers and wooden rectangular cupola having segmental openings, hipped roof and weathervane. 3 storeys and attic. 4 windows. Brick and timber round-arched pergola, erected pre-1894, leads to architraved doorway with panelled doors and cast-iron entrance gables. Stone at 1st floor level. Gauged brick flat arches to recessed sashes; upper floors with louvred shutters. Stone cornice and stone coped brick parapet. No.109: 3 storeys 3 windows in similar style to No.107. Extended late C19 and remodelled 1926 for Mr and Mrs Ernest Joseph. Rear comprises a wide 5light canted bowed bay. No.111: northern former stable range, later C19, possibly with some C18 work, altered C20. Tiled hipped roof with dormers and gabled Diocletian window. Single storey with attics. Former entrances with open pediments and arched niches or fanlights over doorways. INTERIORS: not inspected. HISTORICAL NOTE: Henry Flitcroft bought the copyhold of Frognal Grove in 1741 from Thomas Watson-Wentworth, Earl of Malton. This

house replaced a structure of c1700. Henry Flitcroft junior inherited the house but leased it out, the most famous tenant being Edward Montagu, Master in Chancery who lived there between 1772 and c1794. The house subsequently passed into the hands of the Street family, into which Flitcroft's great-granddaughter had married. The architect GE Street inherited the property in 1871-2 and was responsible for works here. Also known as Montagu Lodge, Frognal Grove was subdivided in the 1950s. (Country Life: Nares G: Frognal Grove, Hampstead - 24 June

1949: 1502-1506; Victoria County History: Middlesex, Vol. IX, Hampstead and Paddington Parishes: Oxford: -1989: 17).

Listing NGR: TQ2613085905





Initial Heritage Impact Assessment No. 111 Frognal, London NW3 6XR March 2021

# APPENDIX C



Photograph of the front courtyard in 1950 prior to conservation to a dwelling showing level access from the courtyard into the stables/garage.



Anthony Caro at work in his studio showing in 1955-56. The photograph shows the raised ground floor level and installation of modern doors have been carried out.





Initial Heritage Impact Assessment No. 111 Frognal, London NW3 6XR March 2021

# Appendix D

Central range rear wall



Central range rear façade with modern fabric highlighted in red. Assumed modern fabric is highlighted in blue and assumed historic fabric highlighted in green



Photograph showing the steps in the rear façade



10 Bloomsbury Way, London WC1A 2SL +44 (0)20 3871 2951 www.theheritagepractice.com info@theheritagepractice.com

Initial Heritage Impact Assessment No. 111 Frognal, London NW3 6XR March 2021

# Appendix E

Summary of East Riding of Yorkshire Council v Hobson [2008] EWHC 1003 (Admin)

'5. On 9th June 2005 the respondent, an architect who had been engaged by the owner of the buildings, was granted Listed Building Consent for extensions and alterations of the listed building. The works in question included what the District Judge described as substantial alterations to the main mill house, plus a two storey extension at the rear and a front porch. Some windows were to be replaced. The consent also covered certain alterations to the stable block. Those were the dismantling of the roof and its reconstruction at a higher level, with the wall plate consequently being raised as well and the eaves and gable brickwork being remodelled.

6. However, the works carried out towards the end of 2005 and into the beginning of 2006 to the stable block went substantially beyond those permitted by the consent. By the end of December 2005 and the beginning of January 2006 the stable block had been largely dismantled, and soon afterwards it was wholly dismantled. Then in the following months of the spring and summer of 2006, works of reconstruction were carried out and seem to have been completed later that year. Some of the original bricks were reused in that reconstruction but it was impossible to assess what percentage. The end result was a new linear block of buildings where the stable block had previously existed.'

The local authority subsequently sought to prosecute the respondent for the demolition works alone as being part of the alteration of a listed building. The Court summed up the issue at paragraph 10 where in it stated:

'That was what gave rise to the issue in the present case. In particular, the question

arose: did the works for the alteration of this listed building affect its character as such a building? This in the event turned upon what was taken into account as constituting the "works for its alteration".'

The local authority argued that the works were simply that of the demolition as those works affected the character of the listed building as a whole. However, the respondent argued that the 'dismantling was part of a larger scheme of alteration which included the reconstruction of the stable block' (para.11).

The first instance Judge then summarised the issue which the High Court had to decide (at para.12):

"Where a defendant is charged with effecting unauthorised works of alteration by dismantling part of a listed building, was I wrong in law to decline to limit my consideration to those works as charged or was I correct in considering further unauthorised works of reconstruction or restoration to judge the effect on the special architectural or historic character of the building."

#### The respondent argued:

"...it is not open to a prosecutor to select one element in a package of unauthorised works and to demand that the remainder be left out of account. He is not entitled to freeze an assessment of a process of alteration at a stage part way through and require an effect on the character of a building to be judged at that stage."

The Court ultimately agreed with the respondent and concluded:

'There is, so far as I have been able to discover (and as the researches of counsel patently have been able to discover), no authority directly on this point or even one providing helpful guidance. But I bear in mind that the purpose of these statutory



Initial Heritage Impact Assessment No. 111 Frognal, London NW3 6XR March 2021

provisions is to protect the special character of listed buildings and that, by their nature, these are entities which endure for some time. The law is not concerned with their transient or temporary position, if such it is. This requires a realistic and practical approach to the use of the words "any works" and the words "in any manner" in section 7. If what is being done by way of works or alteration to a listed building involves both a stage of removal and dismantling and a stage of replacement or rebuilding, it cannot, in my judgment, be right to cease the assessment of the effect of these works of alteration in an artificial manner part of the way through.'



Initial Heritage Impact Assessment No. 111 Frognal, London NW3 6XR March 2021

Appendix F

# The Ground House by Chan and Eayrs

# A restoration of a historic building with natural, breathable building materials

Like most historic buildings built before 1919 the building at 111 Frognal has solid walls and was originally built using brick and porous mortars, plasters and renders based on lime, or sometimes earth or clay, that were often finished with simple, breathable paints such as limewash. It would have been wholly built from breathable, natural materials such as wood, clay, earth and lime.

When it rained, moisture was absorbed into the walls but then the drying effect of the wind and the sun caused it to evaporate. The same thing happened inside, the moisture from cooking, bathing and other activities was absorbed into the surfaces which acted as a moisture buffer but, because these buildings were draughty and had large open fires, the water vapour was drawn out again and dispersed.

During the buildings conversion and renovation in the 20th and 21st centuries much of this natural, breathable, original fabric was removed, and modern materials such as cement render, gypsum plaster, concrete blockwork and plastic modern paint finishes were inserted.

As a result of the insertion of inappropriate impervious coatings both inside and out, the historic building has suffered from decay, rot, damp and mould, as moisture has been trapped either within the solid walls or within the building envelope. Like many historic buildings which undergo modern 'restoration' works, the historic building could no longer breathe.



Both for the authentic restoration of the historic building and for the health of the building fabric and its occupants, we are returning the building to its roots by using natural materials wherever possible.

# **The Ground House**

The Ground House seeks to reinstate the breathable and hygroscopic nature of the listed building by removing unsuitable plastic modern paints and cement renders and walls inserted in the 20th and 21st century by the past owners and replacing them with breathable, organic, natural building materials wherever possible.

In addition to the benefits in terms of conservation credentials and the breathability of these materials they also offer a natural, local, low-carbon-impact route to achieving exceptional thermal performance in the built environment, while ensuring the health and wellbeing of building occupants and producing low- or zero-carbon buildings.



Photographs of hand made bricks drying at H G Matthews, and close up of clay strocks (cob blocks used for new internal walls)

# **Existing Unbreathable Exterior Walls**

The external walls (historic and modern) to the rear are all covered in cement render and impervious, white modern masonry paint.



The front of the house is covered in plastic modern masonry paint, which inhibits the original brickwork from breathing and traps moisture within the walls



On the rear facade, the old fabric (brickwork) is covered in cement render and paint and the new fabric is made of brick and concrete blockwork and covered in the same cement render and paint. Neither are breathable.

We seek to remove all plastic paints, and cement renders stripping the fabric right back to the porous brickwork and re-rendering the facades instead with breathable lime render and lime washes, enabling any moisture within the solid masonry walls to be able to evaporate, improving and ensuring the health of the historic fabric within and the internal air quality by avoiding damp and mouldy conditions where moisture gets trapped.

## **Existing Unbreathable Interior Walls**

Existing internal walls which were inserted in the 1950-60s, are concrete blockwork with gypsum plaster and plastic gloss emulsion paint. Permission was granted to remove the 20th century internal walls.



modern internal partitions in concrete blockwork to be removed

Internal walls inserted in the 20th century are made up of cocrete blockwork and finished in impervious gypsum plaster with plastic internal paints.



Photos of the interior walls show that the wall surfaces are all covered in non breathable glossy plastic paint.



The lack of hygroscopic wall fabric means that moisture is trapped within the building and within the walls leading to decay, condentation and mould.

# **Proposed Breathable and Natural Interior Clay Walls**

We seek to replace the impervious modern walls with natural clay and straw 'strocks' or cob block walls which are breathable with hygroscopic qualities enabling the moisture within the air to be regulated through the clay mass in the walls.

The clay and straw cob blocks are bonded using a clay mortar and can be clay plastered directly onto their face surface; avoiding the need for any gypsum board or plaster or modern unbreathable materials throughout. We will not use any plastic modern paints to ensure the breathability of all walls inside as well as out, the finished interior surfaces will either be clay plaster, custom made with H G Matthews or breathable clay paint by Earthborne.



Clay and straw strock blocks will be used instead of modern concrete blockwork. The strocks are natural and hygroscopic allowing moisture within the air to be absorbed and regulated through the breathable walls, creating a healthier internal environment and building envelope. They are also the perfect clay base for natural clay plasters which are more appropriate and authentic to the historic building than gypsum based plasters and modern paints which currently exist within the house.



Clay plaster and Clay paints will be used internally for a breathable and hygroscopic finish

# **Proposed Breathable Historic Exterior walls**

The historic walls will be stripped of cement renders and modern masonry paint and lime slurry and lime wash will be applied instead; creating the same visual uniformity but with a breathable finish which is appropriate to the original brick fabric. This will have the added heritage benefit of revealing the historic brick texture on the rear facade which is currently covered up. The lime products, will be sourced from specialists in heritage and sustainable building materials Mike Wye.



Lime slurry and wash finish will protect the brickwork whilst maintaining a breathable coating and the brick texture will also be revealed.

# **Proposed Breathable New Exterior walls**

New external walls to the garden basement will also be breathable, utilising custom made heritage woodfired glazed bricks (manufactured by H G Matthews) on the outer face bonded wit lime mortar, natural insulation and an internal clay strock cob block layer and clay plaster finish internally.



We are collaborating with H G Matthew to create our own custom made wood fired glazed bricks for the Ground House.

# Collaboration with H G Matthews on the Ground House

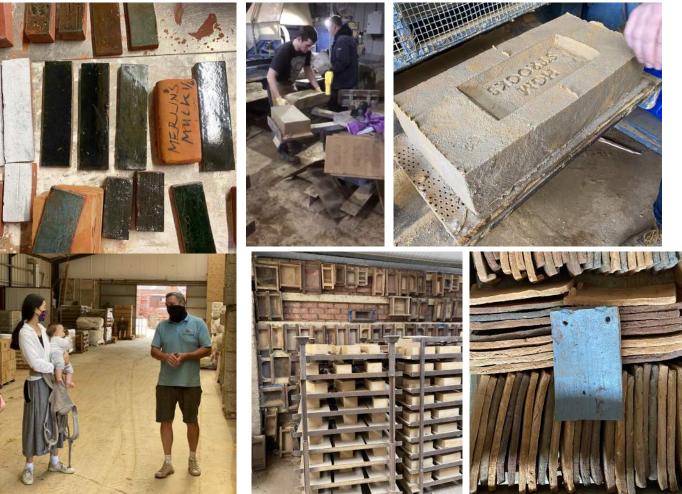
We are working closely in collaboration with Jim Matthews of small scale hand made brick yard H G Matthews to restore the Ground house using and making several bespoke natural products with them.

We are working with them to create :

- 1. Strocks using a combination of their clay and earth from our site
- 2. Custom handmade heritage and wood fired glazed bricks for the garden basement
- 3. Custom made clay plaster to use throughout the interior
- 4. Wood fired traditional and hand made roof tiles on the historic sloped roofs
- 5. Natural hempcrete insulation

The use of clay and earth in the project as a key element of the houses' authentic restoration is the reason behind our projects name: The Ground House.





# More on H G Matthews (suppliers and collaborators on The Ground House)

Henry George Matthews established H.G Matthews in 1923. The traditional techniques that he used have been passed on to his descendants who still run the works today. H G Matthews bricks is a small scale traditional brick yard specialising in hand made traditional wood fired bricks; which have been used on many of the most important and prestigious buildings in England.

# **Traditional skills**

H G Matthews have vehemently maintained the essence of what makes our product unique, keeping the hand making skills alive as well as firing in traditional updraft Scotch kilns which are fundamentally unchanged in design since Roman times.

# What makes H.G Matthews unique

Above all what makes H G Matthews bricks unique is the clay they are made from. This clay, found only in the Chiltern Hills, has been used for centuries because of the beautiful colours that it lends to the finished brick. It is hard to find and extract as it is only found in small isolated pockets thus making very large scale brickmaking impossible in this area.

By focusing on quality they are one of the few smaller scale yards to have survived a transition within the UK brick industry, which has seen the closure of hundreds of small brickworks over the last century. There were over fifty independent brick making companies in Buckinghamshire before the Second World War, we are now the last remaining works in the county.

The virtual eradication of traditional brickyards has led to a sad decline in the local character and distinctiveness of buildings, with handmade bricks being replaced by those that are mass produced. Despite this trend our bricks have always been in demand, especially in quality new builds and the conservation sector. We are proud to play our part in supporting not only the heritage of the Chilterns, but of buildings of beauty around the country.



# H G Matthews Wood firing process

# History of woodfired bricks

Brick buildings predating the 19th Century are widely considered to be amongst the most beautiful in the country. It is the subtle colour shades and glazes that characterise bricks from this era, and that comes from the way the kilns were fired, using wood.

There has been a sad decline in local character and distinctiveness of buildings. Handmade bricks have been replaced by those that are mass produced. Our view was that the industry was lacking woodfired bricks to enable ultra-authentic conservation of some of our most important historic buildings.

We took the decision to learn the woodfiring art and in doing so, successfully reignited a lost technique which was the dominant method of brick production for many centuries.

## **Fuelling the fire**

In the mid 19th Century enabled coal was adopted as a fuel for brick firing as it was quicker, easier and cheaper to use than wood. Coal itself was almost completely replaced in the 20th Century by oil and then gas. While producing an attractive brick in its own right, oil firing does not match the character and beauty of these older buildings.

Fossil fuels obviously have many technical advantages which led to their universal adoption, but only wood can produce the natural glazing effect formed as a result of the complex reactions between the brick and the wood smoke that take place during firing. This is completely absent in all other fuels.

## Woodfired bricks today

All of H G Matthews' wood fired bricks are made by hand, a highly skilled process which dates back thousands of years. Forming the brick by hand produces a sand crease on the surface of the brick, this texture provides the character unique to handmade bricks.

Each brick contains around a pint of water when it is formed, which has to be removed through drying before the bricks can be fired. The heat source for our drying now comes from wood chip burned in biomass boilers. Once dried the bricks are hand set into the kiln, 60,000 handmade bricks are fired in the kiln for up to five days, stoked day and night.

The re-introduction of wood fired bricks enables, for the first time in over a century, the construction of buildings of the distinctiveness, character and beauty of former times, that will also be admired for generations to come.

H.G.Matthews handmade woodfired bricks are arguably the most beautiful brick available and there is no better investment in realising the optimum value and integrity of buildings. Our woodfired bricks are the ideal brick for conservation, restoration work as well as extensions to historical buildings or for new builds requiring a heritage feel.

# Woodfried Handmade Clay roof tiles

Handmade individually using traditional tile frames, H G Matthews roof tiles are produced in a similarly traditional manner to our woodfired bricks. Once removed from the tile frame onto the drying racks the tiles are then dried using the heat from biomass boilers.

From the driers, the roof tiles are then hand set into the woodfired kiln where they are set on top of the bricks and fired for five days, after which time they are left to cool for a further three days before being removed from the kiln and taking for blending.