arts lettres techniques ARCHITECT

23 Gloucester Crescent

Heritage Impact Assessment of
Proposed Amendments to LB 2020/4735/L

May 2021

This supporting statement forms part of a Listed Building Application seeking minor amendments to approval ref. 2020/4735/L (dated 27.01.2021) and is accompanied by the following documents:

Existing situation prior to commencement of the approved works:
GC 101A site plan existing 1-50.pdf
GC 102A basement plan existing 1-50.pdf
GC 103A ground floor plan existing 1-50.pdf
GC 103A ground floor plan existing 1-50.pdf
GC 104A first floor plan existing 1-50.pdf
GC 105A second floor plan existing 1-50.pdf
GC 105A second floor plan existing 1-50.pdf
GC 106A roof plan existing 1-50.pdf
GC 107A section AA existing 1-50.pdf
GC 108A north elevation existing 1-50.pdf
GC 109A west elevation existing 1-50.pdf
GC 110A south elevation existing 1-50.pdf
GC 111 kitchen plan existing 1-20.pdf
GC 112 first floor bathroom plan existing 1-20.pdf

Approved drawings and documentation:
GC 301 site plan proposed 1-50.pdf
GC 302A basement plan proposed 1-50.pdf
GC 303A ground floor plan proposed 1-50.pdf
GC 304A first floor plan proposed 1-50.pdf
GC 305A second floor plan proposed 1-50.pdf
GC 306A roof plan proposed 1-50.pdf
GC 307A section AA proposed 1-50.pdf
GC 308A north elevation proposed 1-50.pdf
GC 309A west elevation proposed 1-50.pdf
GC 310A south elevation proposed 1-50.pdf
GC 311 kitchen plan proposed 1-20.pdf
GC 312 kitchen plan proposed 1-20.pdf
GC 313 Second Floor Bathroom proposed 1-20.pdf
GC 314 South external door proposed 1-10.pdf
GC 315 North external door proposed 1-10.pdf
GC 316 Basement kitchen door proposed 1-10.pdf
GC 317 Basement dining room door proposed 1-10.pdf
GC 318 Basement stair door panelling proposed 1-10.pdf
Covering letter, Statement of Significance, Heritage Impact Assessment, Design/Access Statement

Drawings showing Minor Amendments to the approval:
GC 301A site plan proposed 1-50.pdf
GC 302B basement plan proposed 1-50.pdf
GC 303A ground floor plan proposed 1-50.pdf
GC 304B first floor plan proposed 1-50.pdf
GC 305B second floor plan proposed 1-50.pdf
GC 306B roof plan proposed 1-50.pdf
GC 307B section AA proposed 1-50.pdf
GC 309B West elevation proposed 1-50.pdf
GC 311A kitchen plan proposed 1-20.pdf
GC 312A kitchen plan proposed 1-20.pdf
GC 313A Second Floor Bathroom proposed 1-20.pdf
GC 318A Basement stair door panelling proposed 1-10.pdf
GC 320A Hall Roof plan proposed 1-50.pdf
GC 321A basement flooring proposed 1-50.pdf
Covering letter, Heritage Impact Assessment revised, Design/Access Statement revised

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1 Introduction

A practical conservation-led design, requires knowledge of the physical condition and structural integrity of an asset, to complement an assessment of its significance. Following from this work it is possible to understand the impacts of proposals on significance and to ensure that any negative consequences are avoided or mitigated as fully as possible.

Arts Lettres Techniques obtained listed building and planning consent for reinstatement and conservation works to the house on 27th January 2021 (ref. 2020/4735/L). Following commencement of the works in April 2021, a series of amendments are now required to the consented scheme adjusting the proposed design to ensure that conditions found on site are taken into account in the most conservative manner. Minor changes to the electrical and services installations are also required.

Overview

The minor amendments covered by this application are focussed primarily on discoveries made in two areas of the house: the main roof structure and the basement flooring. Other minor changes are as detailed in the following sections.

The Impact Assessment of September 2020 concluded that the second (top) floor was of limited significance, with interventions from the 1960's leading to substantial fabric degradation and causing a negative impact on the spatial qualities of the accommodation provided here. Those interventions were thus considered to be in conflict, rather than harmony, with the historic building and provided no contribution to the asset's cultural significance. The works to remove the unauthorized roof terrace have revealed the full extent of the poor constructional work undertaken at that time, and careful additional engineering is now required to strengthen the existing building fabric whilst minimising its loss. Full reinstatement of the missing original timber purlins and the strengthening of the original ridge beams, in addition to addressing the historic undersizing of rafters is proposed to address these issues to enable the original valley beam to be left in situ.

Similarly the basement, where a functional kitchen was located, is also considered to be of limited significance, and the discovery of an original flagstone floor with vented cavity system requires a different approach to the previously consented scheme to be adopted here.

This hierarchy of significance has informed the level of interventions proposed to bring the house back to a suitable level of inhabitation in the consented scheme, ensuring the sustained importance of the original building and properly acknowledging the key spaces of the building which have contributed to the output of a renowned cultural figure on the two principal floors. The main proposed changes to the consented scheme are also located in the two least significant floors.

2 Heritage Impact Assessment

This section describes the amendments proposed within each area on each affected floor level and assesses significance as follows:

Key
1 - Exceptional significance
2 - Considerable significance
3 - Some significance - threshold for inclusion
4 - Little significance

2.1 External Plinth

Following careful opening on site the external plinth detail has been confirmed as being original and is considered unusual for this period of house, with no evidence of Roman cement having been applied to the external face of the house wall within the cavity which is full height down to the basement floor level internally. Airbricks are located either side of the basement windows that cut through the plinth (Fig. 1) and at either end and these enable a through-draught to form with ventilation openings just under the original floor level being discovered internally. The existing consent allows for the removal of the modern cement render to reinstate a vapour permeable Roman cement render and this is work is still proposed to enable this feature to function as originally intended (see section 2.2 for further details of proposed associated internal changes)

Fig. 1 West wall lightwell showing vented plinth detail

Fig. 2 Removal of expanded metal mesh reinforced cement render over original Roman cement and creasing tiles

Opening up works to the plinth, seen in progress in fig.1, have revealed 25-30mm of cement with expanded metal reinforcement and various layers of bituminous paint, underneath which moisture has been trapped within the plinth structure. The two layers of creasing tile used to form the sloped top to the plinth have decayed to powder in most instances (fig. 2). It is proposed to replace these tiles with matching clay equivalents bedded in lime based and cement free mortar.

Within the cavity revealed under the decayed creasing tiles a series of irregularly set brick stretchers create an open slot of 4" width, which is as deep as the internal basement sub-floor level. Each stretcher 'tie' is not bedded into the internal structural wall leaf (fig.3), but bonded to it using lime mortar and a slate tile acting as a DPC. Unlike other contemporary early Victorian cavity experiments, this example has been created specifically as a waterproofing strategy to hold the external ground level away from the inner wall.

The presence of ponds slightly above and to the West of the house as indicated on early maps, may have prompted this invention. Whatever the reason, this highly unusual cavity design is of historic technical interest.

It is proposed that the existing cavity will be cleaned of loose debris, the crumbling creasing tiles will be replaced with matching clay creasing tiles and the construction re-rendered with breatheable Roman cement as per the consent.

Fig. 3 View down into the vented cavity showing staggered brick stretcher ties

The separation of the inner house wall from the earth due to the external vented cavity (with its outer wall being the retaining wall), affords the opportunity to avoid using a Newton membrane internally within the basement: thus a vapour-open construction is now proposed to be reinstated internally in the house at this level (see following section). This return to a fully 'breathing' construction is significant for the long term security of the house and is in line with technical advice form Historic England, the SPAB and Historic Scotland.

2.3 Basement

The consented scheme allowed for a renewal of the floor finish in the basement. Careful removal of the quarry tiles and underlying leveling screed laid in the 1960s has led to the uncovering of the original York flagstone floor underneath (see fig.4) in the former passage and scullery. There was no indication that this floor would have survived in situ, given the complete removal of the original walls in the basement in 1969, as noted in the construction drawings of the time, and indeed the quarry tiles within what was originally the kitchen of the house (but later became a dining room) were laid onto to thick concrete slab with no flags present.

Fig. 4 Uncovered flagstone floor showing original threshold between hallway and scullery

There is now an opportunity to bring the original stone floor back into use – it remains in good condition with tightly fitting flags. This discovery has transformed the assessment of significance of the kitchen floor from 4 to 2.

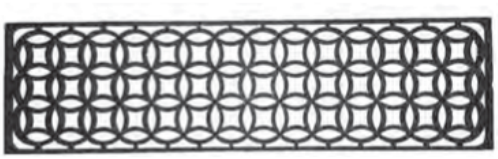
The importance of the floor is enhanced further due to the fact that the stones are not bedded onto a sand blinding on the ground, as is typical, but each stone is instead supported on corner bricks with a slate DPC laid onto a flattened clay base. The void thus created below the flags is around 65mm in height, and is vented via perimeter holes within the base of the west (external) wall (see fig.5). These holes lead to the full basement storey-height vented cavity outside the structural walls that operates as a very unusual damp-proofing feature (see also drawing GC 321).

Fig. 5 Below slab vent to external cavity still semi-blocked with concrete

It is surmised that internal moisture in the house during the last 50 years was not caused by direct water ingress from the external ground but by internal entrapment of moisture as condensation following renovation works including the impermeable concrete slab replacing the vented flag floor in the dining room and the covering of the scullery flags in impervious tiling, along with non-breathable finishes on the walls.

In order to re-introduce adequate air movement around the footings of the wall in the dining room (where the existing concrete slab is to be retained as per the consented scheme), it is now proposed to replace the limecrete lung along the western wall with an open channel under a thin limecrete slab with floor finishes on top. This channel void will be vented to the exterior slot cavity via the 2 original existing interconnecting vent hole and effectively reinstates the original detail here, albeit that the void is not present under the concrete slab. However the vastly improved ventilation directly adjacent to the walls is considered to provide an adequate break to ensure that any residual ground moisture is not driven up the inner face of the wall.

Where the perimeter walls are not adjacent to the external cavity slot, the limecrete lung (as consented) is to be provided with cast iron grilles (fig. 6) to facilitate evaporation into the room whilst allowing a degree of protection to a limecrete that utilizes a hot-lime rather than the usual NHL3.5 or 5. Recent research has indicated that the carbonation process for NHL based limecrete delivers an increasingly hard and vapour-impermeable barrier that creates resistance to water transport. A hot lime mix has a significantly greater permeability but a vulnerable top surface, hence the use of a grating to protect it.



G040 Circular design Grating

L (mm)	W (mm)	D (mm)	CI (kg)	Alu (kg)
970	390	14	22.0	7.9
792	400	14	18.5	6.7
745	200	14	8.7	3.1

Fig. 6 Proposed fine cast iron grille to protect the limecrete perimeter by Ballantine Castings, made in Scotland

The approved use of slate tiles throughout the basement area will therefore be redefined to apply only to the areas of the floor that are already vapour impermeable – the concrete slab areas of the dining room, utility room, understair space and part of the WC. The junction of slate and flagstone delineates the original wall location and plan-form of the basement, with the former scullery and larder subdivision registered by the change of flooring within the kitchen.

The existence of the original cavity technology, and its proposed bringing back into use enables the consented use of 'Newton' membrane to the internal face of the walls to be revisited, and it is considered that this system is no longer warranted. As there is no soil directly behind the basement brick walls, the walls can now be re-plastered internally with vapour permeable Roman cement and a lime top-coat, finished with a vapour-open paint, such as limewash or distemper, in lieu of the non-permeable vented Newton membrane.

The proposed changes to the consented scheme enable the original technical solution for dealing with dampness in the ground to be reinstated as fully as possible and this is considered to be a positive benefit.

2.3 Ground Floor

Study – Significance: 1
It is proposed to re-use an existing double socket location in the study (a back-box having been added in unauthorized works prior to the current consented works). Significance – 4. No further loss of historic fabric is proposed and this amendment is considered neutral.

Cloakroom – Significance: 4
It is proposed to remove the redundant galvanized water tank located above the lowered ceiling of the existing cloakroom. The supporting timber joists holding the tank are decayed, and the significance of the tank is considered to be low. Its presence substantially interferes with the original ceiling height of the space, which was originally the same height as the hallway. Significance of tank – 4. Reinstatement of original proportion and finishes to the cloakroom considered a benefit.

2.4 First Floor

Bathroom Joinery – Significance: 2 / 3
The consented scheme maintained the 1968 layout of sanitaryware and services provisions to minimize further intervention to the historic fabric: thus the bath and joinery detailing is to be retained and restored, or replaced where required with complementary design and materiality.

The basin vanity unit was unfortunately damaged beyond repair during unauthorized removal, with previously repaired cracking also failing. The consented proposal for its replacement is as follows:

"Respecting the materiality and location of the basin within the room and mitigating the loss of the original, a honed marble top above an under-mounted ceramic basin, as close as possible in design and shape to the original will be sourced. Panels are proposed to be re-located onto the walls to complete the dado panelling, the basin instead supported on reclaimed painted metal legs. This enables the visual appearance of the room to be maintained, whilst removing the sharp external corner to the homemade [vanity] unit and providing more space around the basin for family ablutions, as the basin is tucked rather awkwardly into the corner of the room…"
Extract form the approved Heritage Impact Assessment September 2020

Given the relative rarity of Shanks basins with fitted marble surrounds in good condition, the example shown (fig.7) has been purchased to secure its availability. The green colour is appropriate to the Vitrolite splashback, which is being reinstated, and an integral metal stand will provide support, as stated in the consented proposal.

ANTIQUE SHANKS MARBLE BASIN
Cat N°: 01609

Green Travertine topped vanity unit with original underslung basin on chrome tubular stand with restored Shanks taps.

Supplied with waste fittings.

This product cannot be purchased online. Enquire about this product to reserve.

Fig. 7 Replacement Shanks basin with marble top

Consent is sought to omit refitting the mahogany support pieces directly under this basin owing to the location of the metal legs which are too close to the corners of the marble. It is proposed instead to use the mahogany pieces to form the consented shelf immediately adjacent to the sink (in lieu of new material).

The consented scheme also allowed for the installation of a new stand-alone stone shower tray with curtain rail suspended from the ceiling and it is now proposed to omit this unit. Given the high significance of the original bathroom within the house, this decision is considered to enhance the significance of the room, whilst providing the facility of a comfortable shower upstairs in a less significant space (see below).

Master Bedroom Walls – Significance: 2
It is proposed to not re-open the doorway into the linen cupboard to provide ensuite access between the bedroom and bathroom, and the wall/skirting will therefore remain in its present condition. It is not proposed to reinstate lime plaster in lieu of the gypsum plaster installed in 1968 when access to the cupboard was moved from the bedroom to the bathroom, as the gypsum records that an alteration was previously made here (see fig.8). The linen cupboard will therefore be retained as is and access will continue to be from the bathroom. This proposal is considered to be neutral.

Fig. 8 Gypsum plaster door infill to be retained as found

2.5 Second Floor

Bathroom – Significance: 3
The approved scheme allows for a raised step for non-invasive pipework within the shower area which is proposed to be retained, however the tiled area adjacent to a short shower tray has been amended to allow for a longer tray to be fitted, negating the need for tiling on the step and providing a more leak-proof solution for the shower. Given the importance of the plasterwork on the floor below, greater protection against water penetration is considered to be beneficial.

2.6 Roof

Cumulative weaknesses in the roof, caused primarily by the previous alterations made to construct the terrace, demand supportive interventions. The principle being followed for these proposed interventions is to ensure the greatest possible retention of historic fabric *in situ*. A number of supporting metal plates are therefore required: unfortunately removing unsound timber and scarfing in new pieces is not possible with the main structural members, as is detailed below.

Valley Beam

The original valley beam, located between the parallel internal pitched roofs of the house, runs across the bathroom ceiling and is the lowest point of the roof structure. Its vulnerability prior to full opening up was detailed in the consented Statement of significance:

"Where the valley beam runs into the party wall, over the landing, it has significant damp related decay and will require remedial work – possibly grafting a new section of timber with a steel flitch plate to fit into the existing bearing point (which would require to be fully waterproofed), as specified by a Structural Engineer. Using steel would potentially allow for more of the original timber to be retained, however it is not a like-for-like repair and should only be considered if there were no less impactful solution. Invasive investigation needs to be undertaken in order to ascertain the least destructive and most appropriate way to repair this critical timber." Extract from the approved Heritage Impact Assessment September 2020

Fig. 9 Underside of the valley beam at bearing point on masonry wall

The presumption is the retention of significant original fabric wherever practical. As such the use of steel bearing plates specified by a conservation-accredited structural engineer forms part of the application, using 195 x 10mm plates to create a replacement bearing as per fig. 10. This proposal results in the valley beam being retained in situ in its existing state with a structural bearing reinstated and the load of the roof shared to the purlins.

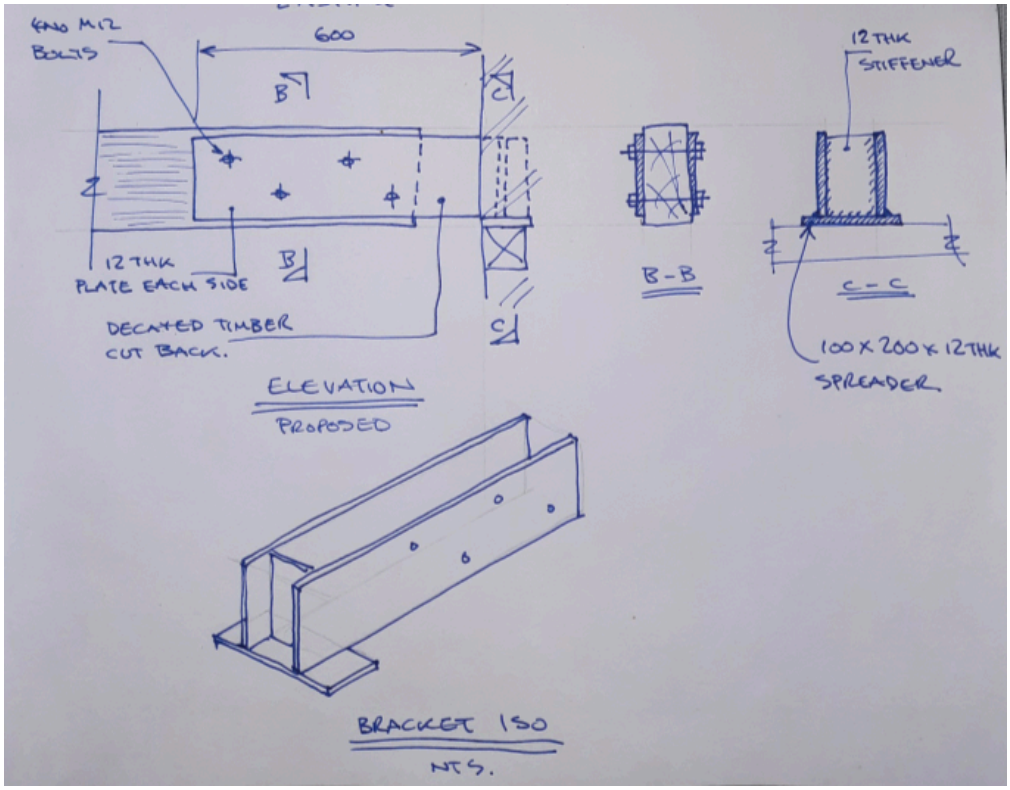


Fig. 10 The Morton Partnership: design for steel bearing plates to replace decayed timber into existing masonry wall.

On removal of the inset terrace structure it has become evident that in addition to its poor bearing the valley beam has also been deeply notched along its length on both its upper and lower surfaces (Figs. 11 & 12). The notching on the top surface of the beam frequently aligns with original mortices cut into the beam to take the original ceiling joists, reducing the effective structural depth of the beam that supports half the weight of the roof.

Figs. 11 - 12 Notching revealed in opening up compromising integrity of the valley beam

Cladding of the beam on both sides with steel plates was initially considered as a means to strengthen it. Constructibility issues (requiring all other timbers which rely upon this beam to be moved), added to the amount of interference with the beam itself (with numerous through-bolts required) has, on balance, been considered to be too great an intervention.

The decision has therefore been made to improve additional support elsewhere to enable the valley beam, the most important structural timber in the house, to remain in its current condition, apart from reinstating its bearing.

Purlins

The reinstatement of the purlins cut through during the terrace installation in 1969 forms part of the consented works to the original roof. These purlins will be connected to the masonry walls using steel supporting brackets (fig. 13) as the original purlins were not bearing into the masonry walls, so no ledge or pocket is available to give support and padstones would otherwise need to be cut into the walls which is considered to be a greater intervention. It is important to gain bearing at either end of the purlins to alleviate loading of the damaged valley beam. These brackets will not be visible, with lime plaster covering the plates.

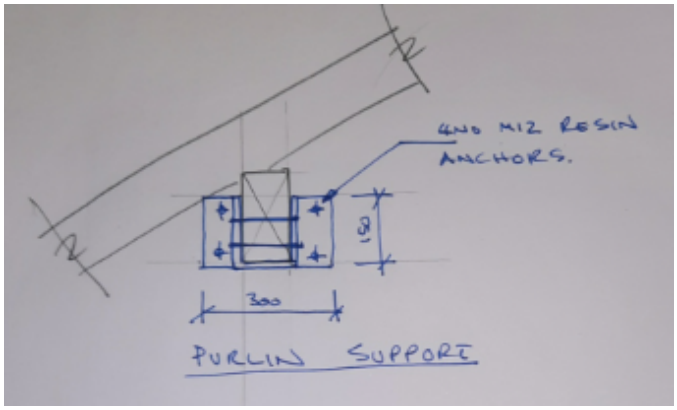


Fig. 13 The Morton Partnership: design for steel bracket for the reinstated purlins

Ridge beams

Retaining the valley beam in situ without strengthening requires the two ridge beams to be provided with additional stiffening. The plan view of the ridge beam strengthening shows the use of three steel 'splints' per ridge, again the original ridges have no bearing onto the wall, rather they provide a connection from pitch to pitch and effectively pass the majority of the roof weight onto the valley beam, which as already noted is compromised (Figs 14, 15). The steel bearing plate requires only a horizontal mortar joint to be opened up for the lateral plate to slide in, allowing the bricks to remain undisturbed.

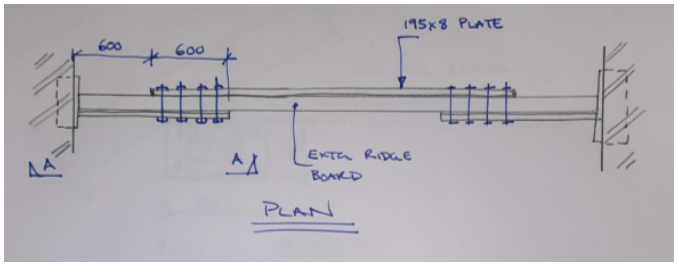


Fig. 14 The Morton Partnership: ridge beam stiffening splints

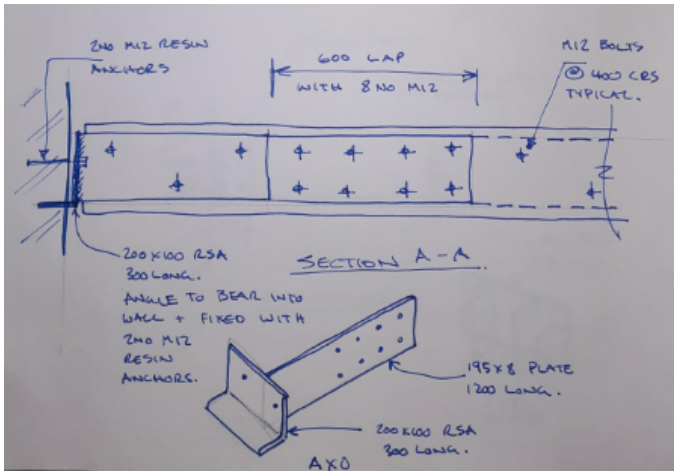


Fig. 15 The Morton Partnership: plate reinforcement plan and end detail with integral bearing plates

The consented scheme proposes the roof ridges to be capped with clay ridge tiles. However the approved removal of the terrace has revealed original hand planed timber rolls for securing lead ridges that were formerly concealed within the terrace parapet cladding.

The original pitched roof has a considered significance of 1, thus the discovery of the original ridge rolls in good condition provides an opportunity to reinstate the lead covering along both ridges (fig. 16). The returning of the lead ridges in addition to the original roof form and materiality is considered to provide an enhanced significance for the roofscape.

Fig. 16 Original timber lead roll adjacent to party wall uncovered following removal of the terrace

2.7 Entrance Vestibule Roof

The consented scheme allows for the repair / renewal of the fibreglass roof to the entrance vestibule. It is now proposed to use lead here instead as a more appropriate covering, with an enhanced lifespan. LSA manual approved details will be utilised for the lead . This is considered a positive benefit as it reinstates the original material covering for the roof.

Appendix 1

Heritage Category:
Listed Building
Grade:
II
List Entry Number:
1342077
Date first listed:
11-Jan-1999
Statutory Address:
23, GLOUCESTER CRESCENT

District:
Camden (London Borough)
National Grid Reference:
TQ 28710 83848
Details
CAMDEN
TQ2883NE GLOUCESTER CRESCENT 798-1/76/559 (East side) No.23 GV II

House with left hand return forming a symmetrical end bay to Nos 37-43 Inverness Street (qv). Mid C19. Stucco. Slated mansard roofs behind gabled fronts with narrow bargeboards. 3 storeys and basement. 2 windows. Entrance in recessed prostyle portico to right; panelled door with overlight. Right hand ground floor window an architraved sash with console bracketed cornice; left hand a canted bay. Lugged architraves to 1st floor sashes with lugged sills. 2nd floor cornice. Round-arched architraved 2nd floor windows with sill bands. Return with channelled stucco ground floor and blocked windows; ground floor a truncated tripartite sash with enriched brackets to mullions, 1st floor a similar full size sash with console bracketed pediment. Plain 1st floor band. Moulded cornice with parapet having arcaded balustrading. INTERIOR: not inspected.

Fig. 16 Listed Building Description, Historic England register.