

# Kidderpore Summer House

Final Report December 2017



Report prepared for:  
Mount Anvil

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## PROJECT SUMMARY

**REGION:** London

**PROPERTY:** Kidderpore Hall  
Kidderpore Avenue  
London  
NW3 7ST

**LOCATION:** External

**OBJECT:** Timber framed and clad. Cast, sectioned concrete columns. Terracotta tiled floor, all sited on a concrete base.

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# REPORT

## 1.0 Introduction

Cliveden Conservation Workshop (CCW) were commissioned to conduct a full assessment of the 19<sup>th</sup> century Kidderpore Summer House to further inform proposals of works. Beginning as a garden folly, the Summer House has served multiple functions throughout its history and had since fallen into a state of disrepair and decay following its most recent use as a boiler room. Succeeding its listing status and consent; (building grade II) Cliveden have proposed future conservation works for the structure. The works will ensure its stabilisation and allow what remains of the building to be used to recreate the original piece alongside sympathetic conservation methods; consequently, allowing the summerhouse's future use by the public.

## 2.0 The Pavilion

### 2.1 Exterior

#### 2.1.1 General

At the time of the on-site survey Kidderpore Summer House was a soft wood (SW) timber framed structure made up of five panels clad with vertical boarding with the main architectural features predominantly to the front of the building. The dominant aspect of the building was the Doric Portico to the front including two pairs of concrete columns, forming the main (only) entrance through a pair of rebated, half glazed doors (*fig 1*). The two adjacent panels, set at 45° to the portico, each contained an opening window with tongued, grooved and V'd (TG&V) cladding boards. The left hand (from the front) panel containing mainly original features, the right panel showing mainly more recent adaptations/alterations. A pair of SW pilasters are the only significant feature on the front ends of the side panels and the rear panel is a plain T&G (tongued and grooved) boarded panel. It has a shallow pitched roof with four hips meeting at a centre solid timber boss. The pediment of the Doric Portico forms the only projecting part of the roof with a ridge from boss to apex. The whole structure is sat on a concrete base with the columns supported on natural stone plinths.

#### 2.1.2 Paint Finishes

Paint analysis revealed 8 painted schemes, and showed that the summer house, although predominantly white was painted dark green when first constructed (see appendix 1. for full architectural paint research report).

#### 2.1.3 Doors

They featured squared, top, middle, bottom rails and gun-stock stiles (*fig 2*). All rebates and glazing beads were planted on (*fig 3&4*). Quarter circled and moulded corner blocks had also been planted onto the upper glazing panel (top only) and lower boarded panel. These lower panels to the doors TG&V with a beaded surround all set at an angle of 45 degrees (*fig 5*). This setting of the boarding ran as a common theme on the original, adjacent elevations containing the single casement windows. The rebate of the door was off-set to allow flush bolts to be set into it so as to be hidden when closed.

Over the years the doors have had numerous interventions to allow for different types of ironmongery leaving large areas weak and vulnerable.

#### 2.1.4 Portico

Adjacent to the doors were two pairs of SW pilasters fronted by corresponding cementitious, plain columns supporting a SW entablature under a recessed timber pediment (*fig 6*). The portico was decorated with dentil blocks extending around to the side elevations where repeated pairs of SW pilasters ended the extent of architectural detail.

#### 2.1.5 Windows

The original window, in the left-hand panel to the portico, was a simple traditionally designed, single, opening casement window with one horizontal glazing bar (*fig 7*). The sill was extended and supported by brackets attached to the external boarding (*fig 8*). Rounded, planted-on mouldings were fixed to the front of the frame to extend it past the external cladding (*fig 9*). At the joint of these mouldings, between stiles and top rail, were quarter round blocks thus removing the sharp corner of the joint. The top rail of the casement had rounded corners corresponding to the rounded blocks (*fig 10*). The right window was clearly a crude, later replacement and had no redeeming features (*fig 11*).

#### 2.1.6 Side and Rear Elevations

These elevations were clad with three types of soft wood vertical boarding. TG&V, TG & beaded (TG&B) and plain tongued and grooved (T&G) boards (*fig 12&13*). The bulk of these elevations were clad with wide (6 inch) T&G boarding with the two rear, radiused corners clad in narrow (3 inch) TG&B boards. From the surveyed boards we were unable to conclude which style of boarding was original (if any) because of the sacrificial nature of timber cladding (*fig 14&15*). As stated before a pair of SW pilasters are the only significant feature on the front ends of the side panels.

#### 2.1.7 Roof

Was constructed of SW timbers, forming a shallow pitched hipped roof. With the hips meeting in the centre against a solid timber boss at the apex (*fig 16*). The pediment roof extended from this boss with a ridge to its apex. No roof covering remained and the whole was in poor condition.

## 2.2 Interior

### 2.2.1 General

At some stage the pavilion has been re-sited, possibly more than once. The latest intervention to the building was to convert it into a boiler house, as a consequence, the internal walls were clad in asbestos sheeting and services were introduced to serve the heating system (*fig 17,18&19*). The walls immediately adjacent to the door architrave showed evidence of a traditional lath and plaster finish. The floor was finished with terracotta tiles and relatively modern. These were bedded with a strong cementitious adhesive making them impossible to remove without damage (*fig 20*).



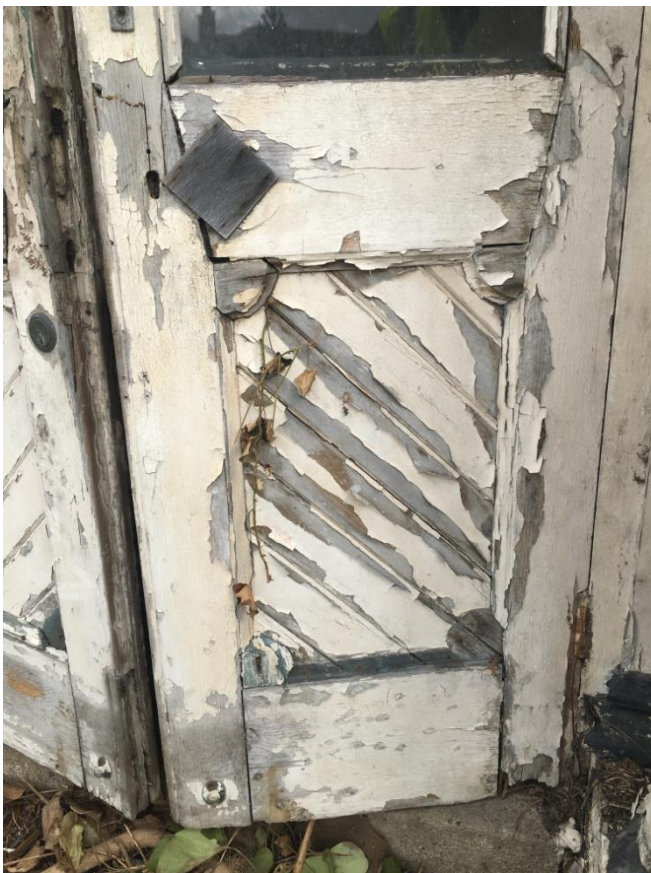
**Fig 1. The Pavilion**



**Fig 2. Doors**



**Fig 3. Corner blocks**



**Fig 4. Bottom panel with corner blocks**





**Fig 5. Angled Panel**



**Fig 6. Portico**



**Fig 7. Original Window**



**Fig 8. Window board bracket**



**Fig 9. Mouldings to front of frame**



**Fig 10. Corner blocks**



**Fig 11. Later window**



**Fig 12 & 13. Boarding**



**Fig 14 &15. SW Pilasters**



**Fig 16. Central timber boss**



**Fig 17. Asbestos lining and services**



**Fig 18. Asbestos and services**



**Fig 19. Asbestos and services**



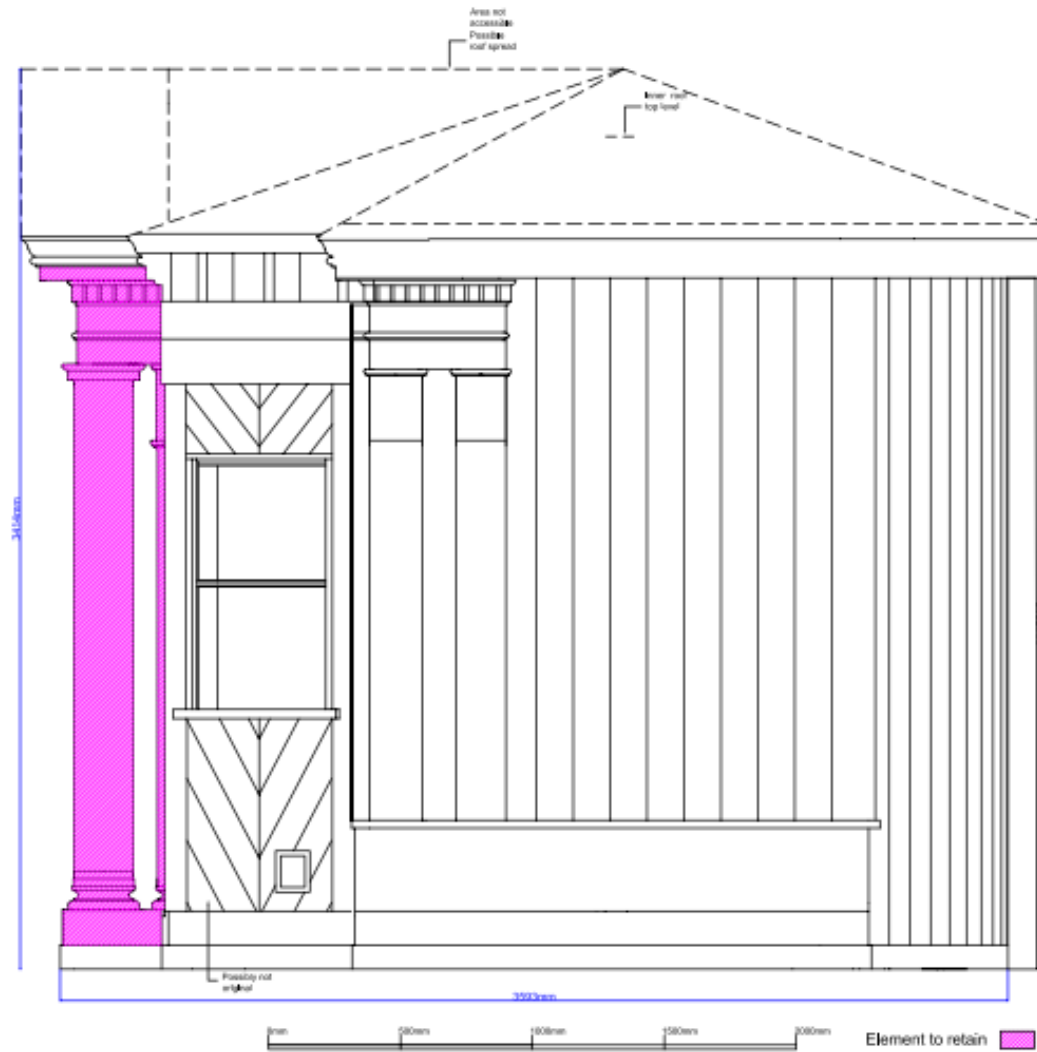
**Fig 20. Floor tiling**

### 3.0 Surviving Elements

The following drawings show the elevations of the Pavilion. The areas hatched in pink show the surviving elements of the Summer House that were made available to us after the controlled removal of all asbestos in the building. These elements have been coated in many layers of paint over its lifetime and will need to be carefully stripped to reveal the condition of the timber beneath before we can assess their condition. Under visual inspection and for the purpose of this report, it appears that the surviving material is in a good condition with only minor repairs required.



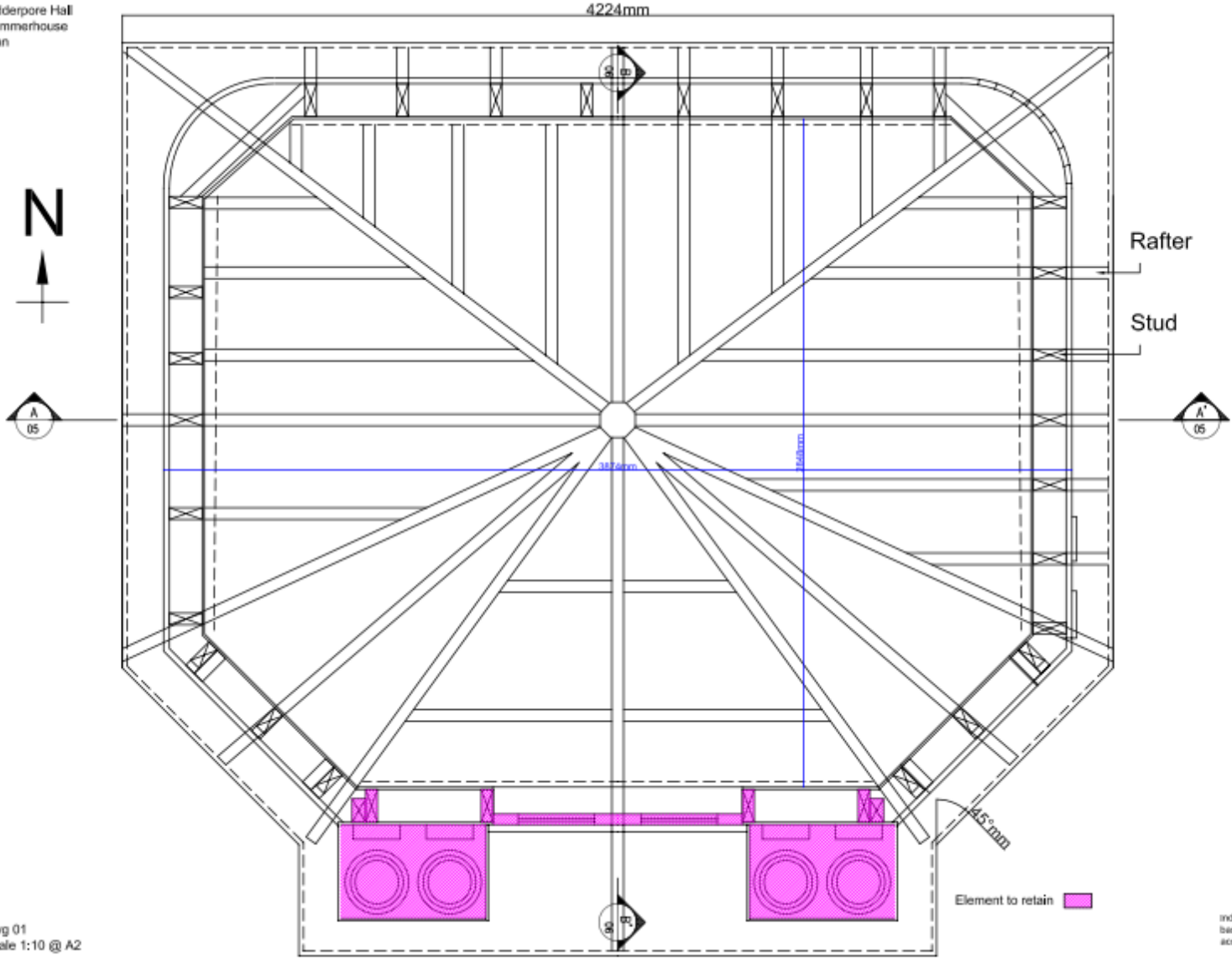
Kidderpore Hall  
Summerhouse  
East elevation



Dwg 03  
Scale 1:10 @ A2

Indicative survey drawing  
based on investigation of  
accessible areas.

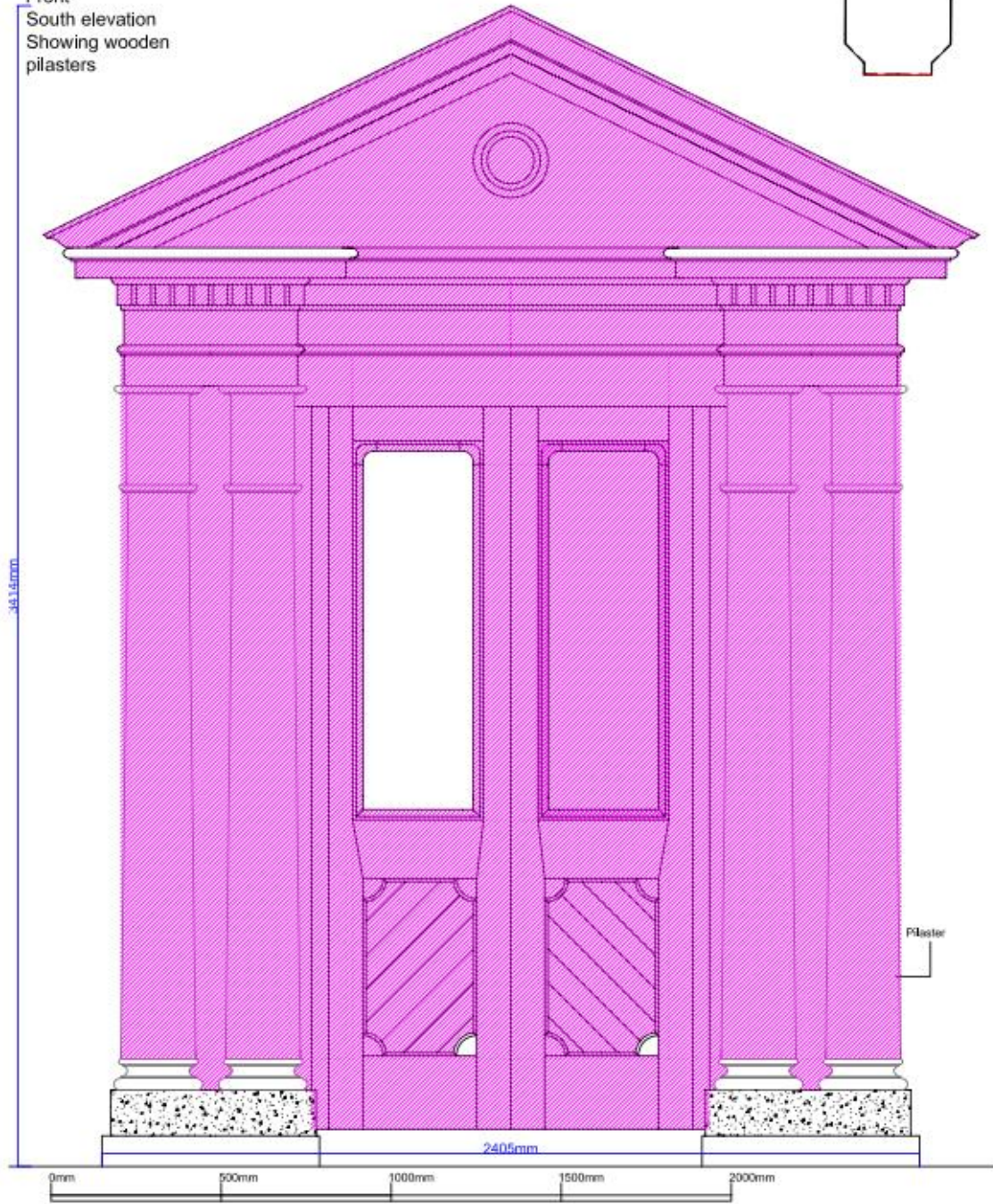
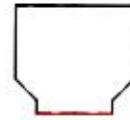
Kidderpore Hall  
Summerhouse  
Plan



Dwg 01  
Scale 1:10 @ A2

Indicative survey drawing  
based on investigation of  
accessible areas.

Kidderpore  
 Summerhouse  
 Front  
 South elevation  
 Showing wooden  
 pilasters

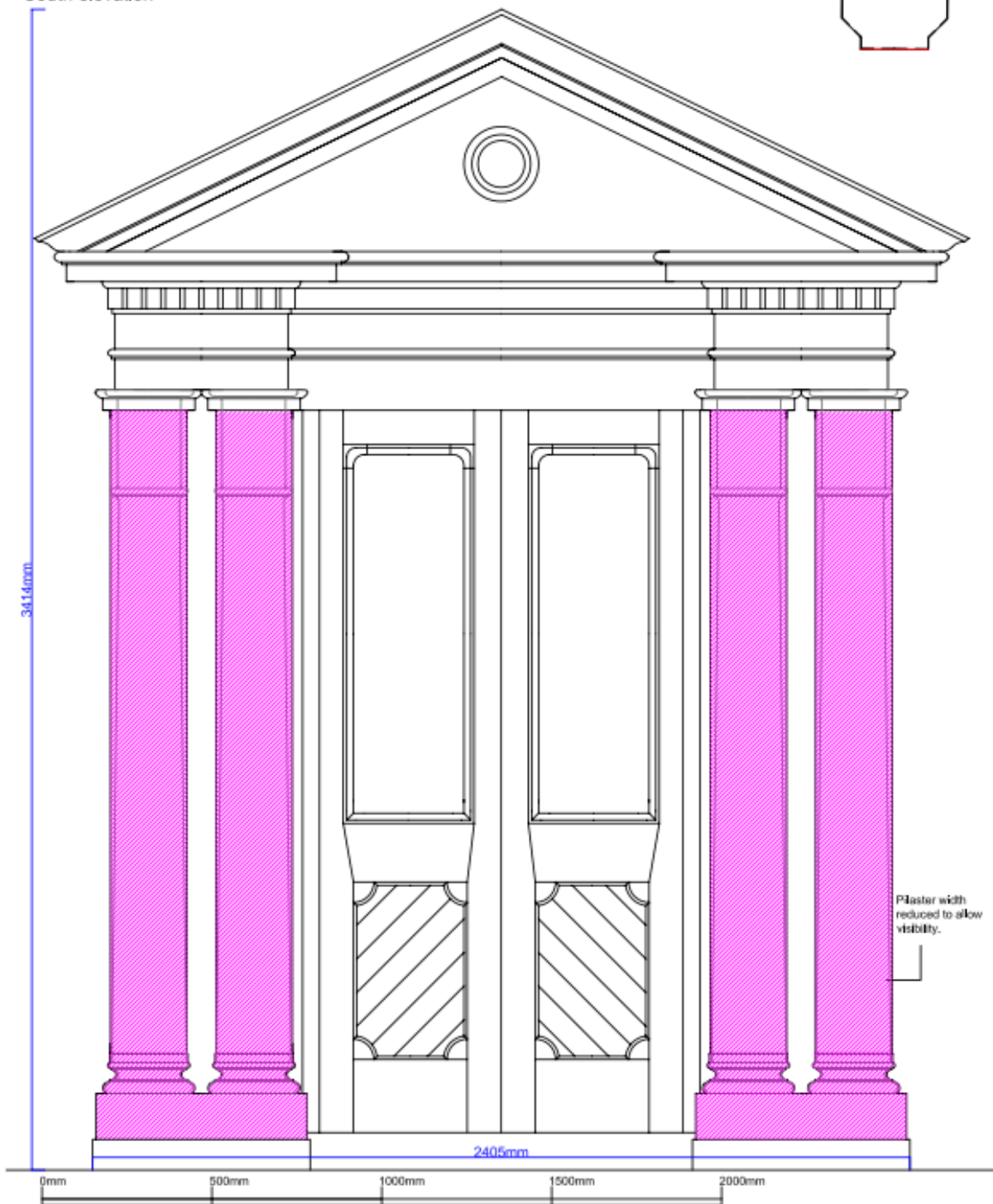


Dwg 02  
 Scale 1:10 @ A3


Element to retain

Indicative survey drawing  
 based on investigation of  
 accessible areas.

Kidderpore  
 Summerhouse  
 Front  
 South elevation

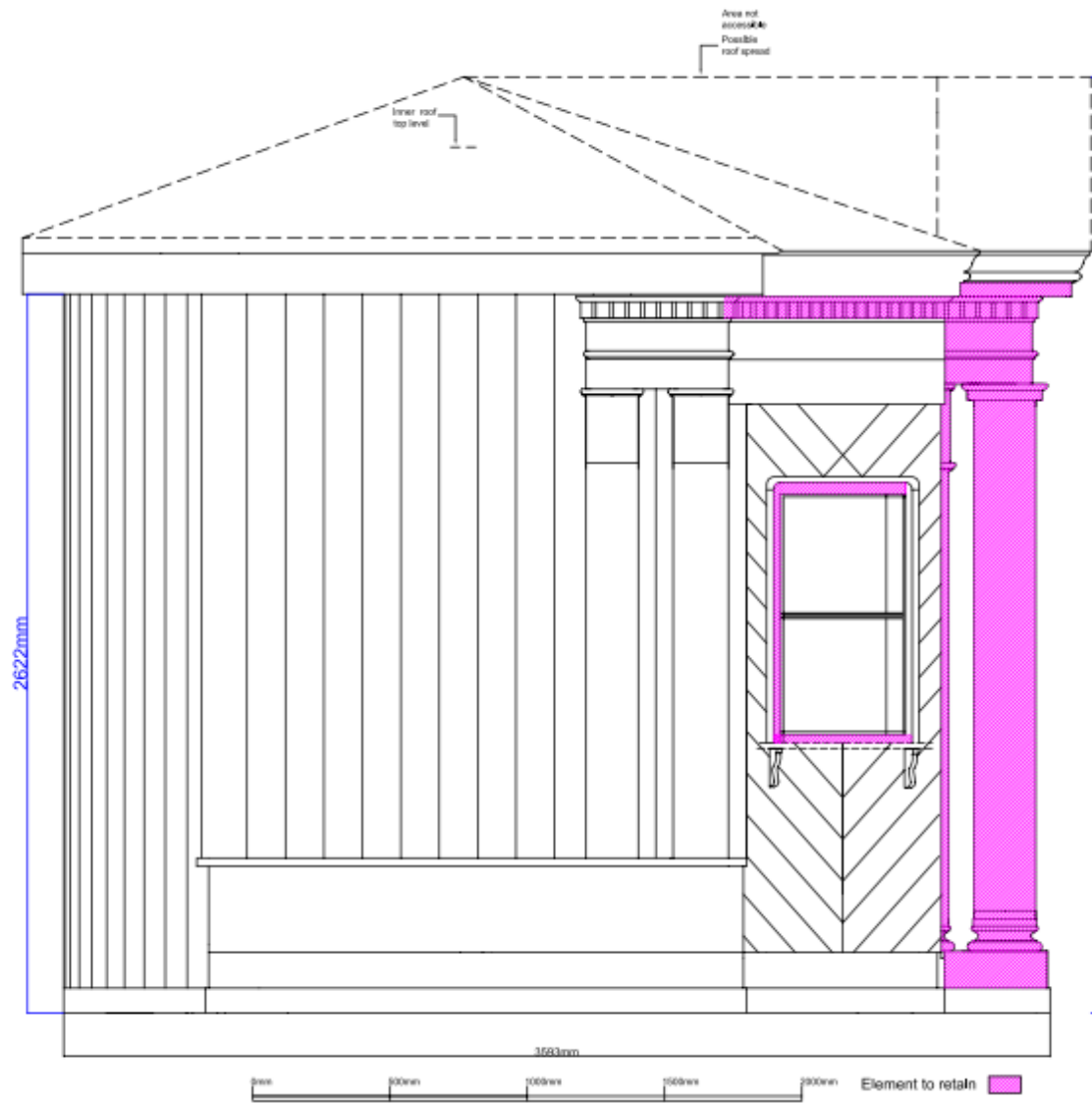


Dwg 02  
 Scale 1:10 @ A3

Element to retain 

Stone columns only highlighted for clarity  
 Indicative survey drawing  
 based on investigation of  
 accessible areas.

Kidderpore Hall  
Summerhouse  
West elevation



Dwg 04  
Scale 1:10 @ A2

Indicative survey drawing  
based on investigation of  
accessible areas.

## Proposals

We have managed to carry out an accurate survey of the Summer House as it was when we visited site on 16th March 2016. The only restriction was limited access to the interior due to the presence of asbestos sheeting and insulation. Although at the time of the survey the building was in a state of partial collapse and disrepair we were able to record enough information to evaluate its original orientation and proportions. We have drawn detailed drawings of this survey and will adapt these to produce further working drawings prior to the re-construction and re-siting of the Summer House. When conserving the building we will use the principles of maximum retention and minimal intervention when repairing the timberwork using traditional techniques and sympathetic materials.

We propose to incorporate all of the surviving elements into the re-construction of the Portico. Missing elements will be replaced/repared with unsorted (premium grade) or 5th grade (standard) Redwood. All external decorative joinery will painted with primer prior to assembly ready to receive finishing coats in-situ. We recommend 1 coat. primer, 2 coat. undercoat and 2 coat. top coat of a good quality oil based paint. A white finish is preferred. A sample panels, of which Cliveden has made (in line with the paint analysis results at the end of this report):

1. S6020-G30Y (Dark green) in Little Greene Tom's Oil Eggshell
2. Lead White EH 57 in Little Greene Tom's Oil Eggshell
3. Jack Black 119 in Little Greene Tom's Oil Eggshell (this is to represent the black found on the column base so we would propose using KEIM in this instance)



The Samples in Little Green, in order 1,3,2. Painted onto construction grade pine.



The existing paint scheme on the Summerhouse. Please note we would not recommend using this as a reference point, please read the paint analysis in Appendix 1.



Samples of Keim painted on a piece of Portland Stone. Keim Royalan was chosen for the black colour because Concretal does not have a strong black in their colour range.

Our proposals for Summer House can be split into 7 main elements:-

1. The base on which it stands
2. The timber carcassing or framework
3. The architectural joinery details i.e. Portico and return panels, doors, windows.
4. The external cladding
5. The roof
6. The stone (concrete) columns
7. Floor tiles

1. The new base is proposed as a flat concrete pad supporting the timber framework and designed in a way as to prevent ingress of water.

2. None of the existing framework (except the door frame) has survived. The nominal thickness of original framework was 4in. We propose to construct the new framework from construction standard 94mm x 47mm treated timber at nominal 400mm centres. and horizontal noggins at 600mm centres.

3. It is fortunate that nearly all of the Portico has survived as this is the area of greatest aesthetic significance. As described previously, we propose to incorporate all of the surviving elements into the re-construction of the Portico with missing elements replaced/repared with joinery grade Redwood.

4. It is difficult to conclude which would have been the original style of boarding as this is the most vulnerable area of the building and probably none that has been recorded is original. We therefore propose to use tongued and grooved vertical boards, nominally 6in. except the boards forming the radiused corners at the rear to be nom. 3in.

5. None of the roof timbers survive. We will construct a new roof to the same profile and proportions as the surveyed roof using construction standard 94mm x 47mm treated

timber. There was no evidence to suggest what material covered the original roof but because of the shallow pitch we can rule out tiles or slates. We would suggest a sheet metal material to be advised. The use of zinc is the most likely candidate in this instance and will be used.

6. There are four Columns that appear to be of reconstituted stone and painted. All four are in good condition though the surface does have several layers of paint that may obscure defects. The columns are made in a single dimension which would have been very difficult to attain in natural stone as the height of the column would exceed the correct bedding plain (natural bedded). The columns could have been realized in natural stone but this would have necessitated them being face bedded which is not uncommon but often results in deterioration with the stone splitting down the now vertical bedding planes. The fact they are reconstituted leads us to assume that the columns are replacements as 'reconstituted' stone (mixture of Portland cement and aggregates and moulded) were not available at the period at which the summerhouse was first realised.

Further evidence for us also to suspect that the columns are not original are the separate column bases. Two square Portland dimensional stone plinths each have two double circular moulded column bases to receive the base of the columns. The circular moulded bases are in poor condition and again appear to be of reconstituted stone and have multiple layers of paint. Where the paint has become detached one can see that the mouldings are heavily eroded and two have iron cramps bridging structural cracks.

What was a puzzle when first observed was the thick (25mm) cement bed on the tops of the moulded when closely inspected where parts of the bed became detached one could see the inner radius was within the radius of the column base and the heavy cement bed made up the difference. This evidence points to the assumption that the columns are not original (the top radius does fit with the wooden ionic capital) and neither are the circular moulded column bases.

The columns and bases form a key feature of the Ionic pediment front and it is not our intention to replace the stone columns as there is no evidence at present to tell us the original column dimension or material as the originals could well have been realized in wood and painted with the Portland stone plinths acting as a damp course. Our proposal is to strip the columns of paint, check for defects and if necessary carry out repairs and repaint in KEIM paint in a colours consistent with that of the building. We also propose to recast the circular bases, as their structural integrity is in question. The new bases would have radii that match the radius of the column base and do not necessitate a large ugly cement joint. It is our recommendation that the circular bases are recast as per the details above. KEIM paint.

7. The floor tiles were not saved in the dismantling as they had been fixed with a very strong cementious mortar. These were not thought to be original as they were of an early twentieth century design. It is proposed that a plain 'quarry tile' is used as a replacement.



## Conclusion

We are proposing to conserve and restore the Summer House using methods and techniques recognised as good practice in building conservation. With the loss of original fabric the completed building will be as close to the original in appearance and design as practicable.

We have not specified any internal finishing. We have not made any allowances for Building Control, or service requirements and therefore have employed a purely conservational approach in preparing this report. The meeting with Mount Anvil on 03/10/17, the following additional items to be considered for the Summer House were discussed:

- Mount Anvil have stated that the Summer house “is intended to be used for biodiversity education”.
- There will need to be a power supply added- a double socket and a ceiling light.
- No water source is needed.
- The front doors need to be lockable.

## Appendix 1: Architectural Paint Research Report

Figure 1: Portico façade of the Summer House



### Client brief and background history

This brief research report looks at three samples removed from the portico entrance of the Summer House at Kidderpore Hall, Hampstead, London .

The samples were removed from site by Alexandra Miller of Cliveden Conservation and forwarded to Crick Smith UoL for detailed cross-sectional analysis. The aim of the research was to identify the original finish decoration of the portico entrance when the Summer House was original built in the mid C19th. The subsequent schemes have also been recorded

Three samples were provided and locations recorded as follows:

Sample 1 – From timber door external

Sample 2 – From stone stylobate (or base)

Sample 3 – From concrete column

Project information provided by A Miller, Cliveden Conservation:

The Summer House is located in the grounds of Kidderpore Hall on Kidderpore Avenue, Hampstead, North London. It was built mid C19th. The Summer House is Grade II Listed.

The grounds of Kidderpore Hall are currently being re-developed, the proposed development involves the retention of the site's five Grade II listed buildings. Kidderpore Hall, the Maynard Wing, the Chapel and the old Skeel Library will all be converted for residential use and the Summer House will be moved to a new location on a site closer to the Chapel, to be used as a community educational facility, which will be utilised by local schools, groups and residents and will provide information about the site and its history. The Summer House will be fully serviced and be a secure building during out of hours periods.

The Summer House is an intrinsic part of the estate. There is evidence of its location being situated near the old Skeel Library from the Ordnance Survey map of 1866. A later Ordnance Survey from 1915 shows the location of the Summer House at its current location of mid way along the rear boundary wall. This is clear evidence that there has been previous success with moving the structure in the past and might go some way to explaining certain features it possesses, which will be covered in this report.

At the request of Mount Anvil, a detailed condition inspection and survey was carried out on the Summer House on 4<sup>th</sup> and 18<sup>th</sup> of April 2016 to assess the physical condition of the structure and to investigate the building's construction for its subsequent dismantling, transport, restoration, storage and reinstatement at a 2<sup>nd</sup> location in the grounds of Kidderpore Hall. After the dismantling, the Summer House will be transported to our workshop in Bath for the restoration works and safe storage. The works cannot be done in situ due to the fact that the site is being redeveloped; therefore suitable and secure local facilities to undertake the works would not be possible. After the dismantling, the Summer House will be transported to our workshop in Bath for the restoration works and safe storage.

The interior walls have been clad in asbestos board and extensive redundant pipe work due to previous use as a boiler house for the main building. Front and side elevations have been surveyed from ground level. The rear was inaccessible and the roof was only partially visible via high access. Notes on non original fabric, repairs and damage have been marked onto the drawings and recorded with photographs.

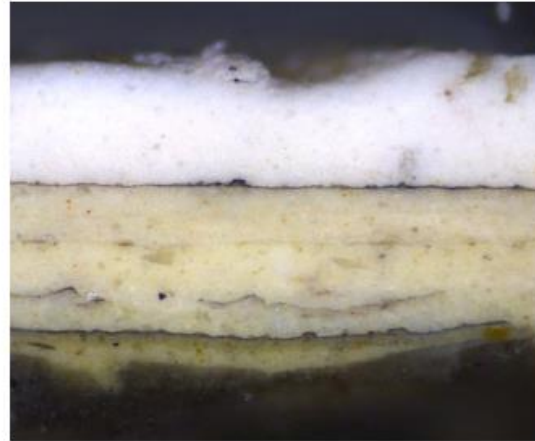
**Chart recording the decorative finishes identified on the three samples removed from the Summer House:**

<b>Sample no. &amp; location</b>	<b>Sample 1: Front timber door external</b>	<b>Sample 2: Stone stylobate or base</b>	<b>Sample 3: Concrete (composite) Column</b>
<b>Scheme no.</b>			
8:	White alkyd and lead mix oilpaint	White alkyd and lead mix oilpaint	Black lead based oilpaint
7: post 1950?	White alkyd and lead mix oilpaint	White alkyd and lead mix oilpaint	Black lead based oilpaint
6:	Cream lead oilpaint	Cream lead oilpaint	Cream lead oilpaint
5:	Cream lead oilpaint	Cream lead oilpaint	Cream lead oilpaint
4:	Cream lead oilpaint	Cream lead oilpaint	Cream lead oilpaint
3:	Weathered strong cream lead oilpaint	Weathered strong cream lead oilpaint	Lightly textured cream coloured lead based masonry paint
2:	Dark green lead oilpaint Colour reference: (NCS) <b>S 6020-G30Y</b>	No paint schemes applied. Stone surface retained	No schemes applied, original substrate surface retained
1: Earliest evidence <b>Mid C19th</b>	Dark green lead oilpaint over an oil rich preparation coat		
Substrate	<b>Timber base</b>	<b>Stone originally unpainted</b>	<b>Composite base originally unpainted</b>

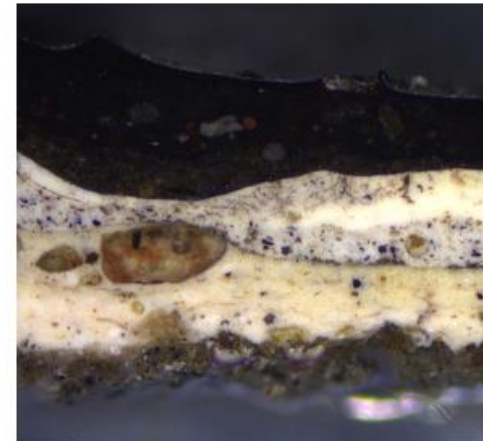
Sample 1: Front timber door external



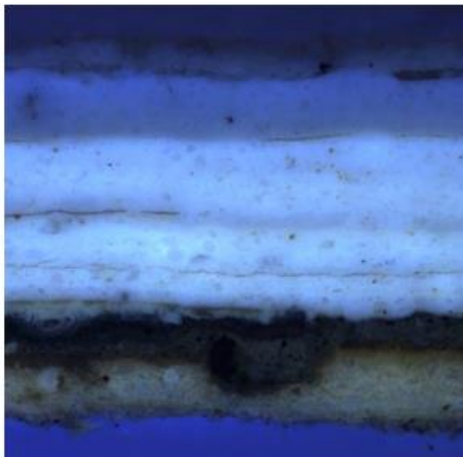
Sample 2: Stone stylobate or base



Sample 3: Concrete (composite) Column



Sample 1: Front timber door external (UV)



#### Description of layers:

The three cross-section images above show the chronology of schemes applied over the three separate elements. The first image, sample 1 door, shows the full paint history back to the first two green oilpaint schemes. The subsequent 4 cream schemes are then clearly seen in sample 2.

A similar chronology to sample 2 is seen in sample 3 with the exception of the final schemes of black paint.

The image adjacent under UV fluorescence shows that all of the layers are lead paint or contain a significant percentage of lead.