

Tottenham House & Estate, Savernake, Marlborough, Wiltshire, SN8 3BE

**NORTH COURTYARD HEALTH AND WELLNESS COMPLEX -ROOF LEVEL
MEP**

Statement to accompany drawings for the partial discharge of LBC Condition 29- of proposed new works, item e) details of any required flues, extract ducts, vents, grilles and meter housings of the Listed Building Consent Ref: 18/00195/LBC

1.0 Introduction

The North Courtyard works are progressing on site with the construction of the Bath House and service wing superstructure, which is now up to roof level. As works on site progress, the detailed mechanical and electrical services coordination has been undertaken.

Whilst the majority of plant equipment is contained within the subbasement plant room, the proposals include several ventilation grilles and certain pieces of equipment located at roof level. These are within new-build elements away from the historic fabric and are broadly in line with the consented Roof Plan, '6150_PLH-06 Rev.A, submitted as part of the 2021 NMA ref. PL/2021/09506 & PL_2021_09253).

Efforts have been made to locate these items in discreet locations to ensure they have minimal visual impact, from vantage points both within the house and in the wider estate. This is both a client requirement and a means to minimise any heritage impact. This has been a fundamental consideration during the design process.

This application sets out these considerations and seeks partial discharge for these works, allowing the MEP installation to progress.

2.0 Item supplied for discharge of this condition:

- THB001-ADA-XX-R1-DR-A-5191U– Proposed Roof Plan Zone A
- THB001-ADA-XX-R1-DR-A-5194H– Proposed Roof Plan Zone D
- THB001-ADA-XX-SX-DR-A-5204N– Proposed Section M
- THB001-ADA-XX-SX-DR-A-5215J- Proposed Section NCL
- THB001-ADA-XX-XX-DR-A-5541B- Single Ply Tapered Roof Details Sheet 3
- THB001-ADA-XX-XX-DR-A-5542A- Service Wing Flat Roof Details
- 6150_326 Rev G Typical Vented Tile Detail & Lead Roof Penetration Detail

2.0 Overview of Proposals

This statement sets out the justification and rationale for the grilles and equipment positions and assesses their visual impact in 3 locations around the North Courtyard, namely

- Gym Corridor Roof
- Escape Staircase Roof
- Service wing roof

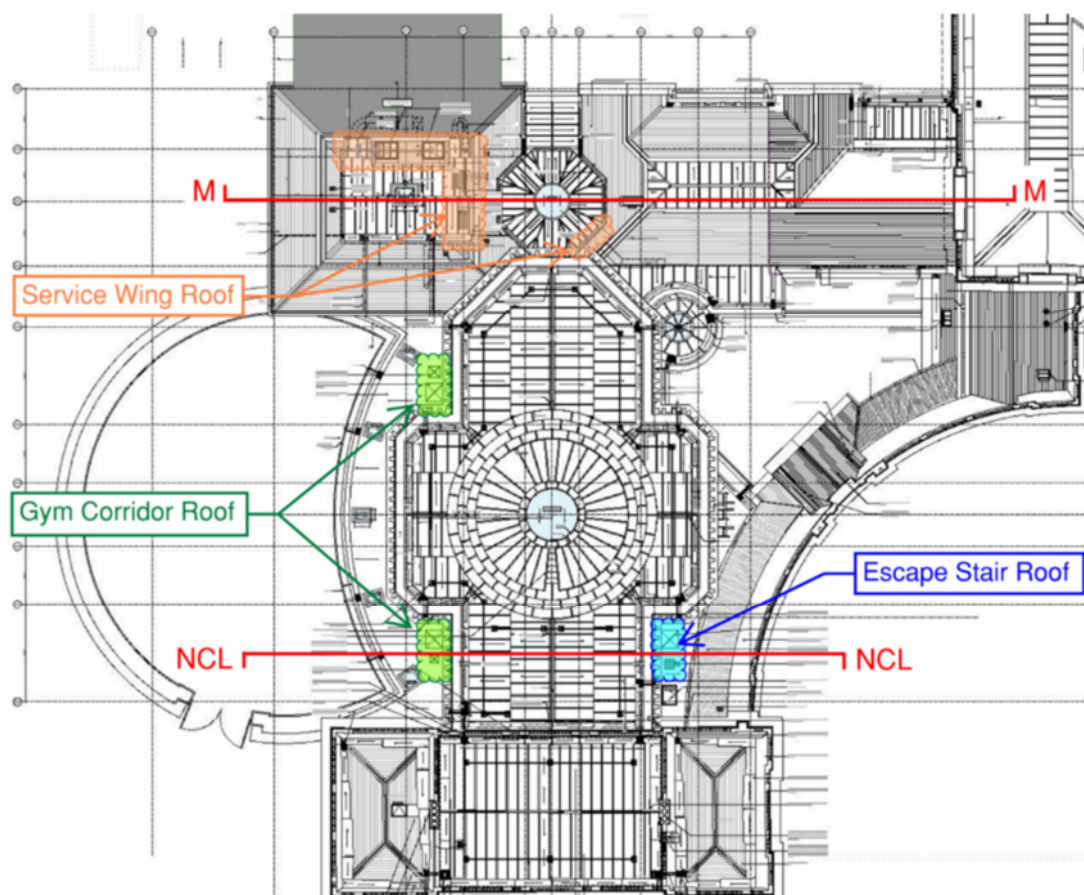


Figure 1- Position of Roof Level Services

2.1 Gym Corridor Roof

The flat roof over the gym corridor is on the North side of the bathhouse and contains 4no. louvered terminals which serve a variety of functions. One terminal provides a fresh air supply to the North Pavilion Undercroft, another exhausts stale air from the subbasement plant room. The final two terminals are not in regular use, but are an essential part of the plant room smoke extract system by providing an immediate supply of fresh air to the subbasement in the case of a fire. These terminals are in a variety of sizes to suit their function, but share a common design, as shown on ADAM detail 5541B.

The gym corridor roof is well suited for these ventilation terminals as it is directly above the service riser points. The roof is not overlooked from the main house, as it is shielded from view by the taller bath house structure. Furthermore, there are no rooms in the North Courtyard or North Pavilion which have an outlook to this roof.

Considering their visual impact at ground level, to the north, the courtyard wall stands 4.5m

which will conceal the grilles from any immediate viewpoints (this can already be appreciated on site, see figure 2 below). Whilst it may be possible to see the top of the grille terminals from distant viewpoints in the pleasure grounds to the north, they will have traditional lead roofs covering and will not appear incongruous with the adjacent architectural treatment or setting. Refer to ADAM Section NCL, drawing 5215J.



Figure 2- View of 4.5m high courtyard inner wall from the north

2.2 Escape Stair Roof

The escape staircase roof is on the opposite side of the bath house to the south, between the clerestory wall and the slate roof covering the link corridor to the Gym. To the south, this sunken area of roof is shielded from the house by the historic curved screen wall.

The roof would contain a further fresh air supply terminal for plant room smoke extract system, mentioned above. It is also proposed that a water chiller unit to serve the plunge pool is located on this area of roof. This location is the optimal location for the chiller due to its concealed position and its close proximity to the North Pavilion Undercroft Plunge Pool.

We have assessed views from both within the house and ground level and we do not believe this will be visible from any vantage point. The aerial photo in figure 3 highlights this concealed position. Refer to ADAM Section NCL, drawing 5215J.

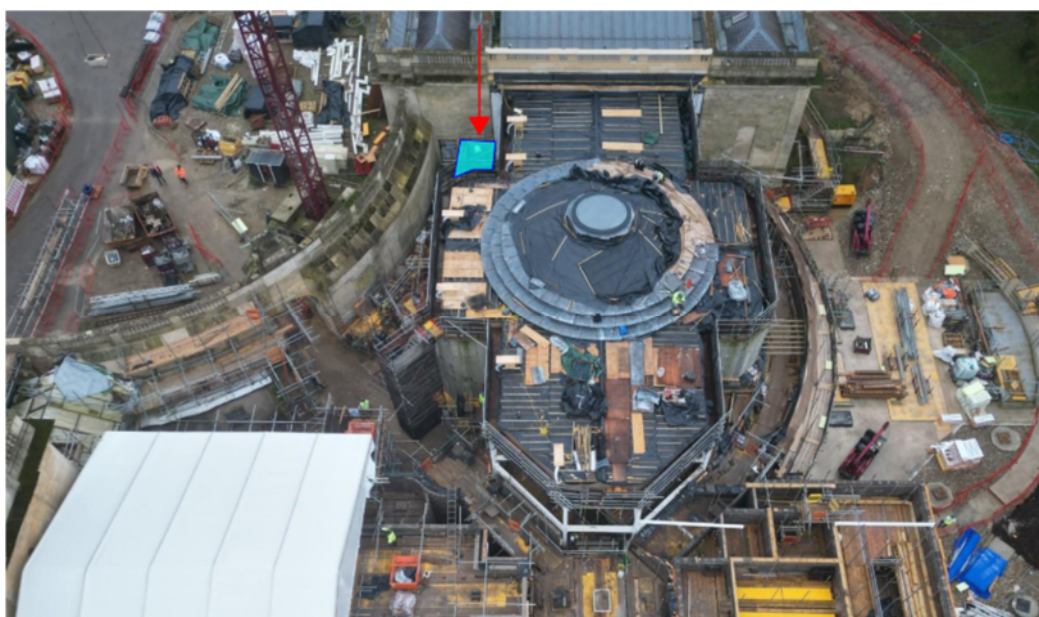


Figure 3- Location of services on the escape staircase roof highlighted in blue.

2.3 Services Wing Roof

The services strategy utilises the central flat portion of the service wing roof to conceal several ventilation grilles and 2no. condenser units. The condensers are required to provide cooling to essential equipment within the subbasement plant room below. The ventilation grilles serve a number of functions, including fresh air and exhaust to the subbasement laundry room, and exhaust air from the kitchen and bathrooms within the Service Wing.

Along the south and east sides of the flat roof, the internal slate roof pitch has been amended to a vertical lead apron, which is required for two reasons. Firstly, it allows us to locate louvered grilles in the face of the apron, secondly it allows us to conceal the two condensers from possible vantage points from the second-floor windows in the North Range, see figure 4 below. These changes to the roof will have no impact to the form of the building as it is perceived at ground level. This arrangement can be seen on ADAM detail 5542A and in context on Section M, drawing 5204N.

This area of the roof will also require several slate ventilators connected to the soil vent pipes. This will use the same consented detail used for vent pipes across the main house, included also in this pack, ADAM drawing '6150_326 Rev G Typical Vented Tile Detail & Lead Roof Penetration Detail'.

To the south, on the lower portion of flat roof above the octagonal lobby, a further ventilation grille will be located in the north-facing apron of the adjacent pitched roof. This serves as the exhaust air grille to the swimming pool air handling unit. Fresh air to the pool will be provided by a decorative grille located in the lightwell adjacent the Bakehouse courtyard. Details of this grille have yet to be confirmed and will be submitted in due course.

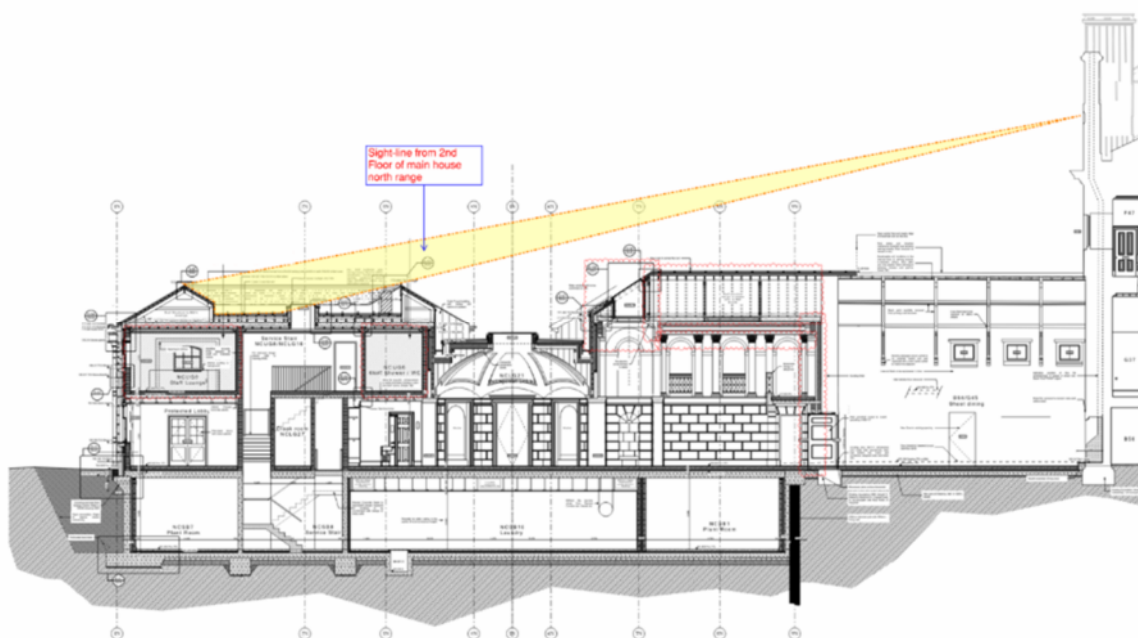


Figure 4- Location of services on the escape staircase roof highlighted in blue.

3.0 Heritage Context

The roof level services contained herewith are entirely formed within new building fabric, so the assessment of heritage impact focusses on the visual impact to the wider setting, which has been described under the relevant sections above. Great effort has been made to ensure services are kept off the higher and more visible portions of roof, for instance, the bath house roof is entirely free of services.

In addition to the visual impact of any services, we have also assessed the acoustic impact, ensuring all external services around the North Courtyard will be suitably attenuated to meet the strict noise criteria imposed in this setting.

We believe this demonstrates the services have been integrated into the North Courtyard with minimal negative heritage impact.

4.0 Summary

The subbasement plant room and leisure facility function of the North Courtyard requires this portion of the building to contain a high degree of services. Wherever possible, equipment has been located internally at subbasement level, but some grilles and equipment located at roof level will be required.

This was understood at the time of application and suitable provision had been considered in the form of the new building. This has allowed these services to be sensitively and discreetly positioned with negligible impact to the historic setting.

Although the details were not known at the time, the proposals largely reflect what was shown on the consented Roof Plan, '6150_PLH-06 Rev.A, submitted as part of the 2021 NMA 9ref. PL/2021/09506 & PL_2021_09253).

ADAM.