

KING'S CROSS CENTRAL BUILDING R1

Plot R1 King's Cross

Discharge of Planning Condition 4
Details of Rooftop Elements

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INTRODUCTION

This report relates to the discharge of Condition 4 attached to the Building R1, Development Zone R, King's Cross Central, Planning Permission (ref: 2015/2886/P).

Condition 4 states: "Details of any lights, meter boxes, flues, vents or pipes, telecommunications equipment, alarm boxes, television aerials, satellite dishes or rooftop 'mansafe' rails to be installed on the external face of the building, shall be submitted to and approved in writing by the local planning authority.'

The application hereby enclosed includes a summary of the main roof elements their positioning on the roof of the R1 building as well as descriptions and technical data sheets of the main roof and facade mounted services and mansafe systems.

The first part of the document provides an overview of the roof, facade mounted and mansafe systems – detailed information and drawings provided by the specialist subcontractors is then included in the later sections / appendices.

Further information can be made available to Camden Planning Officers on request.

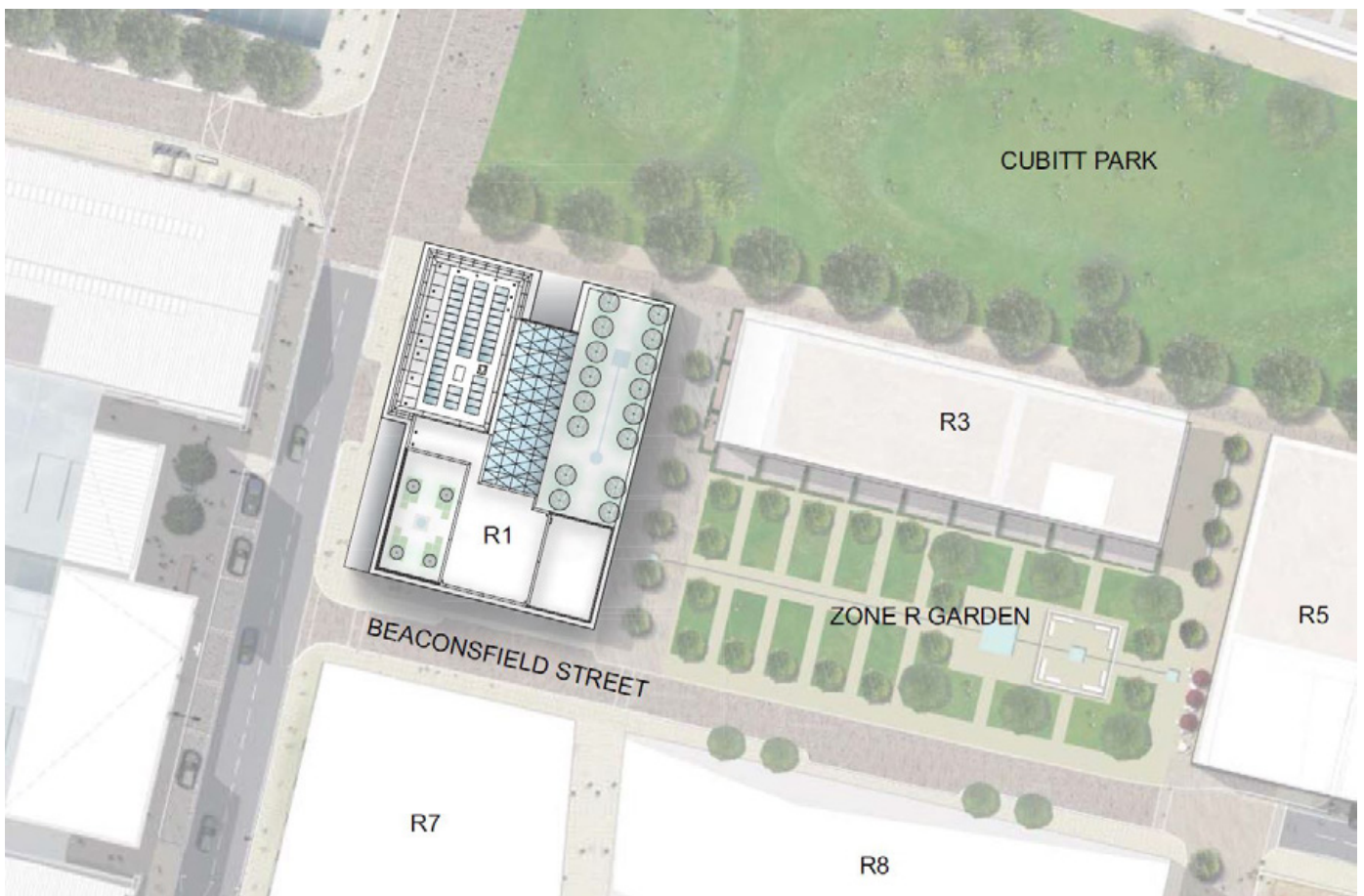
ROOF OVERVIEW

The design of the roof of the R1 Building as a whole, including plant, garden areas, PV panels and brown roof, has been considered with care and attention to design and detail in the early design stages.

It takes into consideration environmental aspects such as sustainability and ecology, while also providing a beautiful environment which will be enjoyed by users of the building in the gardens and terraces at roof level and by the general public in views from street level.

The design approach is described in detail in the Design and Access Statement submitted at planning stage and has been carried through into the detailed development.

Refer to Appendix 1 for drawing.



LEVEL 9 ROOF AREA

Two roof gardens and one terrace are situated at 9th floor level, occupying approximately 36% of the plan roof area of the building with a further 3 terraces located on the lower levels.

These spaces create valuable amenities for building users and provide a rich habitat for flora and fauna to thrive, increasing biodiversity and enhancing the ecological value of Building R1 and the wider KXC site. They will be subject to a separate submission to address Planning Condition 05 – the Talar Terrace, Anteroom Garden and Sky Park Garden are therefore not described in further detail in this submission, but their location is indicated in the overview roof plan.

The remaining roof area of level 9 is occupied by a compact plant area which will be enclosed with decorative metal panels and therefore will not have an impact on skyline views from lower levels.

It will comprise the following elements:

- Cooling towers
- Kitchen, WC and smoke extract units / ductwork
- Irrigation plant, pumpsets and tank to gardens
- Water feature plant, pumpsets and tank to serve gardens
- Satellite dish
- Future tenant plant space (condensers)
- Other miscellaneous plant equipment, pipework etc.

The design team has invested considerable time and effort in the development of this congested plant area and the design has been rationalised to ensure none of the plant elements extend above the proposed enclosure. Detailed layouts of all plant elements in the cooling tower enclosure have been prepared by the MEP subcontractor and are included in Appendix 1 of this document.

Some electrical items, such as cameras, emergency sounders and wifi points will be incorporated in roof garden areas, but will generally be concealed where possible.

Refer to Appendix 1 for drawing.

LEVEL 10 ROOF AREA

The roof area at level 10 is split into a lower roof area towards the east side of the building and a higher, inclined roof area which sits on top of the Crown Room located towards the south-west.

The lower roof area includes mainly brown roof areas to satisfy the ecological stipulations of the planning permission. Details of the build-up and the maintenance regime of the brown roof areas will be subject to a separate submission to address Planning Condition 10 and are therefore again not described in further detail in this submission.

The two flues required for the building are also located on this lower roof area. These extend above the finished roof level in line with regulations, but have been kept to the lowest level permissible. Further information on the flues is included in Appendix 1 of this document.

A number of soil vent and other pipes also terminate at this roof level. These extend generally no higher than 300mm above roof level and are not described in more detail.

The higher roof area above the crown room is inclined to create a more interesting roof silhouette and to allow sufficient space to conceal lift overruns and a plant room within the height below and again includes brown roof areas.

The photovoltaic panels required to achieve the renewable contribution of the R1 building will be located above the brown roof areas, but will sit below the roof parapet to ensure that the PV arrays cannot be seen from the ground.

Kitchen and WC extract and intake ductwork also terminates at this level, but has again been kept as low as possible and located away from the roof edge to avoid it being visible for the ground.

Lighting will be included at roof plant level and will generally be bulkhead lighting fixed to parapets. It will be switched on in the event that repairs or other maintenance activities have to be required to be carried out at times with insufficient daylight.

Refer to Appendix 1 for drawing.

FACADE MOUNTED SERVICES

The facade mounted services of the R1 building have been kept to the absolute minimum to avoid detracting from the clarity of the facade composition and materials.

They comprise the following elements:

- Intercom units

Intercom units have been incorporated either as bollards (main entrance) or wall-mounted units (east and north elevations) to allow access to the building after hours and communication with reception or security staff for non authorised users.

These units will generally be stainless steel and carefully designed and incorporated.

- Security cameras

Security cameras are generally dome cameras and required in several ground floor locations and on the terraces. They have been recessed, with only the dome projecting past the building line.

Details of louvred areas within the facade have been submitted and signed off as part of the submission for Condition 03 and the only other facade recessed services will be external lighting which will be subject to a separate submission to address Planning Condition 09. No other facade mounted services are proposed.

Refer to Appendix 2 for drawing.

MANSAFE SYSTEMS

As roof areas on the R1 building are mainly occupied by terrace and garden spaces, no MEWP or similar has been included at roof level and the building facades will be cleaned and maintained via abseiling.

The necessary systems have been carefully incorporated into roof and parapet areas to ensure that they are as discreet and unobtrusive as possible. Davits and other projecting elements will only be located in the relevant areas when cleaning is in progress, but stored elsewhere when not in use.

The mansafe and abseiling systems include the following:

- The North façade of the Sky Park has a rail & trolley system for abseiling incorporated into the concrete upstand, and is serviceable from inside the garden. This will not be visible from street or garden level, but may be seen from adjacent buildings. The west façade is accessed with removable Davit arms connected to bases concealed beneath the paving.
- Around the Anteroom Garden and Cooling Tower areas, an abseiling davit arm rail system is discreetly incorporated at the top of the aluminium enclosure, and will not be seen from surrounding buildings, access to this is from the level 10 mansafe & cooling tower platform which will not be visible.
- The lower roof area at level 10 is also accessed via a ladder concealed in the cooling tower enclosure and a low level wire mansafe system allows safe access to this area.
- Abseiling posts are located along the eastern edge of this lower roof area to allow facade cleaning of the east side of the building.
- The area above the crown is accessed via a hatch form within Stair A of the building which also serves as a smoke extract opening. This area again includes a low level mansafe system for safe access.
- Abseiling posts are positioned to the western and southern roof edge of the crown roof to allow facade cleaning of the relevant areas below.
- The west façade of the Atrium roof has small abseil anchors built in the mullions, and the roof has a wire mansafe system allowing safe access around the roof.

Refer to Appendix 3 for drawing.

APPENDIX 1 - EXTERNAL SERVICES:

- 1.1 – Roof overview Plan
- 1.2 – Cooling Tower
- 1.3 – Photovoltaic Panels
- 1.4 – Crown Roof Sections
- 1.5 – Roof lighting
- 1.6 – Flues

APPENDIX 2 - FACADE MOUNTED SERVICES:

2.1 Overview Elevations

2.2 Intercom Units

2.3 Cameras

APPENDIX 3 - MANSAFE SYSTEMS:

3.1 Mansafe overview plans and details

