

The Richard Stephens Partnership Limited

Mill Court
Mill Hill
Edenbridge
Kent TN8 5DB

Tel: 01732 782300 Fax: 01732 782340
mail@thersp.co.uk www.thersp.co.uk



ROYAL FREE HOSPITAL
INTENSIVE CARE CHILLER REPLACEMENT
ROOF LOCATION FOR CHILLERS
JOB NO: 2407/2345

DESIGN AND ACCESS STATEMENT

25th May 2023

1. Description of the proposal and plant summary

The work includes the direct replacement of 3no existing air-cooled packaged chillers that were installed in circa 2012 and have come to the end of their economic life. The 3no chillers are located on external roof areas of the Royal Free Hospital, on the South, West and East wings at approximately 4th floor level (podium roof).

The chillers provide comfort cooling to the 4th floor Intensive Care Unit (ICU), which due to clinical air cleanliness requirements is a mechanical ventilated floor of the hospital, with 100% fresh air system. The ward is a critical clinical space for the hospital, and as such the space temperature control provided by the chillers is also critical to providing the level of patient care required.

The proposed replacement chillers match the existing for performance duty, and include dual circuits, and packaged hydraulic pack complete with buffer tank and circulation pumps housed within the frame of the chiller.

To match the acoustic performance of the existing chillers, which were granted planning permission at the time, the South and West wing chillers are to be installed complete with acoustic attenuator package, which is mounted immediately around the chiller with removable sections for maintenance.

Due to the size and weight of the new chillers and acoustic packages, it is necessary for the South and West existing structural steel support frames to be extended to adequately support the new equipment, and provide access for maintenance to the equipment.

The chilled water pipework will be modified locally, however will largely as existing with no visual impact compared with the existing.

2. Access proposals

The new plant area does not impact on public access around or within the hospital. Access to the plant area will be from the existing hospital and restricted for maintenance personnel.

Directors:
Peter A Smiles IEng, MCIBSE MIET MIHEEM
Andrew M Paterson BEng (Hons) AMIMechE
Gerry S Connor MSc BEng CEng MCIBSE
Stephen V Cowlin MSc BEng (Hons) CEng MCIBSE

Associate:
Andrew Lee BSc FIHEEM

Registered Office:
Mill Court, Mill Hill,
Edenbridge, Kent TN8 5DB
Registered in England No. 04982311

