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DESIGN STATEMENT

12 ARGYLE WALK, LONDON WC1 TANKERTON WORKS INSTALLATION OF NEW ENERGY-EFFICIENT HEAT-PUMP SYSTEM

6th July 2015

1.0 Introduction

The existing building was constructed in the 19th century as a factory outlet and was converted circa 2004 to office premises at ground and first floor levels with storage at basement level. It is currently part-tenanted by an architectural practice and is part vacant.

Whilst some thermal improvements to the Victorian building fabric were undertaken as part of the original conversion (circa 2004), the space heating and cooling provisions were not environmentally considered at that time. Occupants have subsequently been reliant on portable plug-in heaters and coolers to maintain an acceptable working environment over the past decade, with a correspondingly high CO2 output.

The new owners of the property wish to improve the building's energy efficiency by installing a more modern and appropriate system, and to further reduce CO2 impacts with the implementation of solar panels.

If these systems are approved, it is anticipated that the overall CO2 footprint of the fully occupied building will reduce by as much as 52.5% over current usage.

2.0 Design Background

Our proposal is to replace the existing portable appliances with a more energy-efficient, reverse-cycle heat pump system.

The general scope of works requires the removal of the existing portable units which will be replaced by a 3 pipe VRF condenser system with fixed, wall-mounted indoor units covering all floors.



Our initial proposal was to install a new M&E room internally, to accommodate the new heat-pump units.

This approach required the replacement of a large central window (in the main street elevation) with ventilation louvres. However, after discussions with the case officer, it was deemed that this solution would be unfavourable due to Conservation area requirements affecting this frontage.

Other options were discussed with the case officer, with a preference for small, discreetly-positioned units at high level, on the provision that the main street views were not substantially affected.

Likewise, the front-facing solar panels needed to be re-located to a position where they would not be so visible from street level.

3.0 Planning Proposal

The heat-pump units are now located on top of the flat-roof area at the west-end of the building and will not be visible from the Tankerton Street or Argyle walk site-lines. They will also be barely visible from the neighbouring properties due to their low profiles and the dense trees canopies in Argyle Walk and neighbouring gardens.

Taking into account the pre-planning advice, the sizes of the units have been considerably reduced and will be appropriately attenuated.

To comply with safe-working requirements, a new access hatch to this flat roof area will be provided with safety-harness anchor points in appropriate locations.

To further improve the energy efficiency of the building it is proposed to install solar panels on the flat roof between the two existing skylights, which will be virtually flat to minimise any visibility issues from the public highway. Again, safety-harness anchor-points will provide safe access for maintenance purposes.

In addition to being virtually flat-mounted, the new solar panels will be similar in colour to the existing asphalt roof and will therefore have minimal visual impact on any over-looking properties.

4.0 Summary

These proposals have been developed following discussions with Camden Council and are intended to significantly improve the energy-efficiency of this building whilst retaining the character, history and nature of the surrounding area.

After considering the pre-planning advice dated 19th May 2015 from Mr Carlos Martin, we believe we have achieved a solution that offers a good balance between the growing environmental concerns at large, whilst being empathetic with the historic character of this building and it's immediate surrounds.

