Technical Note

Project	Greville Street
Title	Planning Condition 12
Ref.	248
Rev.	F
Date	27.06.22

Introduction

The purpose of this technical note is to outline information submitted as part of the discharge of condition 12 of application 2018/0910 –

"Prior to occupation of development, full details of the proposed air source heat pumps shall be submitted to and approved by the Local Planning Authority in writing. The measures shall include:

a) *Air-air/ air-water system proposed.*
b) *Details of seasonal COP (should have a system SCOP of 4 to be considered renewable) and seasonal Energy Efficiency ratio (SEER).*
c) *The applicant should demonstrate that ASHP is lower in terms of CO2 emissions than other heating/cooling systems.*
d) *Noise/visual impacts should be considered.*
e) *Metering details should be provided.*
f) *System should comply with minimum performance standards as set out in the ECA and MGS certification requirements.*

Reason: To ensure the development provides adequate on-site renewable energy facilities in accordance with the requirements of policy CC1 of the London Borough of Camden Local Plan 2017."

This note will summarise the submitted information.

Documents

The following documents are to be submitted as part of the discharge of condition 12:

a) Air-air/ air-water system proposed.
   - The air source heat pump (ASHP) is being used to provide heating by means of Radiators positioned on the stairs.
   - See HTS-XX-ZZ-SC-M-55-098_AF_ASHP & Wet Radiators Schematic (14-02-22)(2).
   - See HTS-XX-RF-DR-M-57-107_S3_C07_ Roof Ventilation Services.

b) Details of seasonal COP (should have a system SCOP of 4 to be considered renewable) and seasonal Energy Efficiency ratio (SEER).
   - The installed hybrid VRF system is a low-carbon system and is not considered to be a renewable technology. The heating SCOP and cooling SEER are included in section 3.3 of the Greville St Building Reg Compliance Design Note 05.
   - We can confirm that the LTHW design has accounted for LTHW temps at 34DegC. This means the SCOP rating for the heat pump achieves 4.48. Please see 7. PUZ-HWM140VHA ASHP.
   - See Greville St Building Reg Compliance Design Note 05.
   - See 7. PUZ-HWM140VHA ASHP.

c) The applicant should demonstrate that ASHP is lower in terms of CO2 emissions than other heating/cooling systems.
   - The building SBEM calculations demonstrate that the installed hybrid VRF system delivers more efficient heating and cooling, and lower associated CO2 emissions, than traditional gas-fired heating and chilled water systems. As recorded in the BRUKL report the hybrid VRF system contributes to an overall saving of 1.3 kgC02/m2.
   - See Draft Greville Street Offices Brukl Rev 3 210420.
   - See 7. PUZ-HWM140VHA ASHP.

d) Noise/visual impacts should be considered.
   - An acoustic report has been completed as part of condition 15.
   - See 21187-R01-A Plant noise assessment report.

e) Metering details should be provided.
   - A description of the metering provision is included in section 3.5 of the Greville St Building Reg Compliance Design Note 05.

- See Greville St Building Reg Compliance Design Note 05.

f) System should comply with minimum performance standards as set out in the ECA and MGS certification requirements.

- See ASHP Certificate.