Addendum Report

Planning Sub Committee 16 January 2023

UPDATE FOR CONSIDERATION AT PLANNING SUB-COMMITTEE Item No. 8

Reference No: HGY/2022/2723	Ward: Seven Sisters
Address: Brunel Walk N15 5HQ **Proposal:** Redevelopment of Brunel Walk to provide 45 new Council rent homes in four buildings ranging from 3 to 4-storeys high including 39 apartments and 6 maisonettes. Provision of associated amenity and play space, cycle and refuse/recycling stores and 4 wheelchair parking spaces. Reconfiguration and enhancement of existing parking areas and outdoor communal areas and play spaces on the Turner Avenue Estate	

[To note: the numbering as set out in this addendum corresponds with the numbering of each section within the Officers committee report]

Amendments to Conditions

[Condition 21 is altered to reflect the concerns of the Climate Change Officer around the affordability of the energy strategy with amendments including the addition of part (b) which seeks to ensure that the heating strategy is affordable for future residents]

21 The development hereby approved shall be constructed in accordance with the Energy and Overheating Assessment prepared by Meinhardt (dated 5 October 2022) delivering a minimum 100% improvement on carbon emissions over 2013 Building Regulations Part L, with SAP10 emission factors, high fabric efficiencies, air source heat pumps (ASHPs) and a minimum 82.5 kWp solar photovoltaic (PV) array.

(a) Prior to above ground construction, details of the Energy Strategy shall be submitted to and approved by the Local Planning Authority. This must include:

- Confirmation of how this development will meet the zero-carbon policy requirement in line with the Energy Hierarchy;
- *Confirmation of the details of the heating strategy, how it complies with part b) below and how it could be compatible with a potential future DEN connection or accommodate future retrofit (as required by condition 30)*
- Confirmation of the necessary fabric efficiencies, and space heating demand, to achieve a minimum 18% reduction with SAP2012 carbon factors;
- Details to reduce thermal bridging;
- Location, specification and efficiency of the proposed ASHPs (Coefficient of Performance, Seasonal Coefficient of Performance, and the Seasonal Performance Factor), with plans showing the ASHP pipework and noise and visual mitigation measures;
- Specification and efficiency of the proposed Mechanical Ventilation and Heat Recovery (MVHR), with plans showing the rigid MVHR ducting and location of the unit;
- Details of the PV, demonstrating the roof area has been maximised, with the following details: a roof plan; the number, angle, orientation, type, and efficiency level of the PVs; how overheating of the panels will be minimised; their peak output (kWp);

- Confirmation of how the solar PV electricity generation will be used on site;
- A metering strategy.

(b) Prior to above ground construction, details of the Heating Systems Management Plan should be submitted to and approved by the Local Planning Authority:

- *How the system will be owned and managed;*
- *Identify heat supplier, system owner (if different to the Council), system designer and installer, operation and maintenance regime and provider;*
- *How costs and responsibilities will be split between the heat supplier, building owner/housing provider, residents including agreements covering use of the system and charging arrangements. This should also include expected annual costs to a two bed, 4-person family in the development;*
- *Standards of service and compensation to residents for poor service;*
- *Long-term operation and maintenance arrangements;*
- *Risk allocation between different parties in terms of energy costs, plant replacement costs and poor system performance/poor standards of service.*
- *The expected running / life cycle costs for this system (as set out in Section 7.16 of Energy Planning Guidance).*

The development shall be carried out strictly in accordance with the details so approved prior to first operation and shall be maintained and retained for the lifetime of the development. The solar PV array shall be installed with monitoring equipment prior to completion and shall be maintained at least annually thereafter.

(c) The solar PV arrays and air source heat pump system must be installed and brought into use prior to first occupation of the relevant block. Six months following the first occupation of that block, evidence that the solar PV arrays have been installed correctly and are operational shall be submitted to and approved by the Local Planning Authority, including photographs of the solar array, installer confirmation, an energy generation statement for the period that the solar PV array has been installed, and a Microgeneration Certification Scheme certificate.

(d) Within one year of first occupation, evidence shall be submitted to and approved by the Local Planning Authority to demonstrate how the development has performed against the approved Energy Strategy and to demonstrate how occupants have been taken through training on how to use their homes and the technology correctly and in the most energy efficient way and that issues have been dealt with. This should include energy use data for the first year and a brief statement of occupant involvement to evidence this training and engagement.

Reason: To ensure the development reduces its impact on climate change by reducing carbon emissions on site in compliance with the Energy Hierarchy, and in line with London Plan (2021) Policy SI2, and Local Plan (2017) Policies SP4 and DM22.

[**Condition 25 is altered to reflect the revised modelling with the Central London weather files**)

25 Prior to the above ground commencement of the development, an updated Overheating Report shall be submitted to and approved by the Local Planning Authority. The submission shall assess the overheating risk and propose a retrofit plan. This assessment shall be based on the Energy and Overheating Assessment prepared by Meinhardt (dated ~~5 October~~ 2022~~2~~4 *January 2023).*

This report shall include:

- *Updated* ~~Revised~~ modelling of units *and corridors* modelled based on CIBSE TM59, using the CIBSE TM49 London Weather Centre files for the DSY1-3 (2020s) and DSY1 for 2050s and 2080s, high emissions, 50% percentile;
- ~~Additional sample modelling of the corridors;~~
- Demonstrating the mandatory pass for DSY1 2020s can be achieved following the Cooling Hierarchy and in compliance with Building Regulations Part O, demonstrating that any risk of crime, noise and air quality issues are mitigated appropriately evidenced by the proposed *location and specification of measures,*
- *No active cooling is to be used on this development;*
- Modelling of mitigation measures required to pass future weather files, clearly setting out which measures will be delivered before occupation and which measures will form part of the retrofit plan *(without relying on occupant adaptation measures);*
- Confirmation that the retrofit measures can be integrated within the design (e.g., if there is space for pipework to allow the retrofitting of cooling and ventilation equipment), setting out mitigation measures in line with the Cooling Hierarchy;
- Annotated floorplans showing which spaces/dwellings have been modelled;
- Summary tables of the modelling results.

The development must be built in accordance with the approved overheating measures prior to the first occupation of the development and retained thereafter for the lifetime of the development.

REASON: In the interest of reducing the impacts of climate change, to enable the Local Planning Authority to assess overheating risk and to ensure that any necessary mitigation measures are implemented prior to construction, and maintained, in accordance with London Plan (2021) Policy SI4 and Local Plan (2017) Policies SP4 and DM21.

ADDITIONAL CONDITIONS INCLUDED

Condition 31 is included to ensure all balconies facing east and west are fitted with privacy screens prior to occupation.

31 Prior to occupation the balconies facing east and west as shown on plans; PL_3201 Rev I, PL-3202 Rev I, PL_3300 Rev I, PL_3301 Rev I, PL_3302 Rev H, PL_3401 Rev I, PL_3402 Rev H, PL_3501 Rev H shall be fitted with privacy screens and retained in perpetuity.

Reason: To avoid overlooking into the adjoining properties and to comply with Policy SP11 and London Plan Policy D6

Condition 32 is included to ensure adequate regard for Land Contamination

32 Before development commences other than for investigative work:

a. Using the information already submitted in the Geotechnical Design Report 12621-A2SI-XX-XX-RP-Y-0002-00 Rev.00 prepared by A2 Site Investigation Limited dated February 2022, ground gas investigation and assessment with chemical analyses on samples of the near surface soil in order to determine whether any contaminants are present and to provide an assessment of classification for waste disposal purposes shall be conducted. The site

investigation must be comprehensive enough to enable; a risk assessment to be undertaken, refinement of the Conceptual Model, and the development of a Method Statement detailing any additional remediation requirements where necessary.

b. The risk assessment and refined Conceptual Model shall be submitted, along with the site investigation report, to the Local Planning Authority which shall be submitted to, and approved in writing by, the Local Planning Authority prior to that remediation being carried out on site.
c. Where remediation of contamination on the site is required, completion of the remediation detailed in the method statement shall be carried out and;
d. A report that provides verification that the required works have been carried out, shall be submitted to, and approved in writing by the Local Planning Authority before the development is occupied.

Reason: To ensure the development can be implemented and occupied with adequate regard for environmental and public safety.

Condition 24 is removed given the current energy strategy is not compatible with a future connection to the DEN. Condition numbers will be updated accordingly.

~~24 Prior to the above ground commencement of construction work, details relating to the future connection to the DEN must be submitted to and approved by the local planning authority. This shall include:~~

- ~~Further detail of how the developer will ensure the performance of the DEN system will be safeguarded through later stages of design (e.g. value engineering proposals by installers), construction and commissioning including provision of key information on system performance required by CoP1 (e.g. joint weld and HIU commissioning certificates, CoP1 checklists, etc.);~~
- ~~Peak heat load calculations in accordance with CIBSE CP1 Heat Networks: Code of Practice for the UK (2020) taking account of diversification.~~
- ~~Detail of the pipe design, pipe sizes and lengths (taking account of flow and return temperatures and diversification), insulation and calculated heat loss from the pipes in Watts, demonstrating heat losses have been minimised together with analysis of stress/expansion;~~
- ~~A before and after floor plan showing how the plant room can accommodate a heat substation for future DEN connection. The heat substation shall be sized to meet the peak heat load of the site. The drawings should cover details of the phasing including any plant that needs to be removed or relocated and access routes for installation of the heat substation;~~
- ~~Details of the route for the primary pipework from the energy centre to a point of connection at the site boundary including evidence that the point of connection is accessible by the area wide DEN, detailed proposals for installation for the route that shall be coordinated with existing and services, and plans and sections showing the route for three 100mm diameter communications ducts;~~
- ~~Details of the location for building entry including dimensions, isolation points, coordination with existing services and detail of flushing/seals;~~
- ~~Details of the location for the set down of a temporary plant to provide heat to the development in case of an interruption to the DEN supply including confirmation that the structural load bearing of the temporary boiler location is adequate for the temporary plant and identify the area/route available for a flue;~~

- ~~Details of a future pipework route from the temporary boiler location to the plant room.~~

~~Reason: To ensure the development reduces its impact on climate change by reducing carbon emissions on site in compliance with the Energy Hierarchy, and in line with London Plan (2021) Policy SI2 and SI3, and Local Plan (2017) Policies SP4 and DM22.~~

Appendix 3 Consultation Responses from internal and external consultees

Revised Carbon Management Comments:

<table>
<tr><th>Stakeholder</th><th>Question/Comment</th><th>Response</th></tr>
<tr><td>INTERNAL</td><td></td><td></td></tr>
<tr><td>Carbon Team</td><td>Carbon Officers comments dated 16/01/2023

In preparing this consultation response, we have reviewed:
• Overheating Note, Issue PO1 prepared by Meinhardt (dated 4 January 2023)

Response
<u>Energy Strategy</u>
Following discussions around the proposed heating solution, the applicant has not yet provided sufficient information on heating systems management and operational costs to future tenants. As such, a revised planning condition has been recommended for the energy strategy (with tracked changes below).

<u>Overheating</u>
Revised information has been issued in response to the comments on the Overheating Strategy. This has been reviewed. This includes revised modelling with the Central London weather files.

Results are listed in the table below for all dwellings within Blocks A-C. Only a sample of Block D was assessed, but it’s not clear how many of the proposed dwellings have been modelled without manually counting this.

<table>
<tr><th>London Heathrow</th><th>TM59 – criterion A (<3% hours of overheating)</th><th>TM59 – criterion B hours >26°C (pass <33 hours)</th><th>Number of habitable rooms pass TM59</th><th>Number of corridors pass</th></tr>
<tr><td>DSY1 2020s</td><td>100%</td><td>100%</td><td>100%</td><td rowspan="3">100% pass</td></tr>
<tr><td>DSY2 2020s</td><td>98%</td><td>41%</td><td>100%</td></tr>
<tr><td>DSY3 2020s</td><td>89%</td><td>52%</td><td rowspan="7">Not reported in a summary table</td></tr>
<tr><td>DSY1 2050s</td><td>90%</td><td>51%</td><td rowspan="7"></td></tr>
<tr><td>DSY2 2050s</td><td>83%</td><td>0%</td></tr>
<tr><td>DSY3 2050s</td><td>79%</td><td>0%</td></tr>
<tr><td>DSY1 2080s</td><td>78%</td><td>0%</td></tr>
<tr><td>DSY2 2080s</td><td>50%</td><td>0%</td></tr>
<tr><td>DSY3 2080s</td><td>50%</td><td>0%</td></tr>
</table>
</td><td>Comments noted, conditions amended accordingly</td></tr>
</table>

	All rooms pass the overheating requirements for 2020s DSY1. The following measures were assumed for this model: - Natural ventilation, with openable areas of 30% for side-hung windows (to pass the modelling) - Glazing g-value of 0.4 - External vertical side fins to the west façade and horizontal brise soleil on southern façade - MVHR with summer bypass and boost mode (19 l/s) - No active cooling In increased weather conditions, residents are encouraged to: - Use portable fans - Minimise internal heat gains - Keeping windows open as long as possible – it is noted that this advice is too generic and vague when the outside temperatures are higher outside than inside. It is noted that the above results demonstrate improved compliance under the London Weather Centre files in some cases. A revised condition has been included below to reflect the updates (including tracked changes). **Revised Planning Conditions** *<u>Energy strategy [Revised Condition 21]</u>* *The development hereby approved shall be constructed in accordance with the Energy and Overheating Assessment prepared by Meinhardt (dated 5 October 2022) delivering a minimum 100% improvement on carbon emissions over 2013 Building Regulations Part L, with SAP10 emission factors, high fabric efficiencies, air source heat pumps (ASHPs) and a minimum 82.5 kWp solar photovoltaic (PV) array.* *(a) Prior to above ground construction, details of the Energy Strategy shall be submitted to and approved by the Local Planning Authority. This must include:* - *Confirmation of how this development will meet the zero-carbon policy requirement in line with the Energy Hierarchy;* - *Confirmation of the details of the heating strategy, how it complies with part b) below and how it could be compatible with a future DEN connection;* - *Confirmation of the necessary fabric efficiencies, and space heating demand, to achieve a minimum 18% reduction with SAP2012 carbon factors;* - *Details to reduce thermal bridging;* - *Location, specification and efficiency of the proposed ASHPs (Coefficient of Performance, Seasonal Coefficient of Performance, and the Seasonal Performance Factor), with plans showing the ASHP pipework and noise and visual mitigation measures;* - *Specification and efficiency of the proposed Mechanical Ventilation and Heat Recovery (MVHR), with plans showing the rigid MVHR ducting and location of the unit;* - *Details of the PV, demonstrating the roof area has been maximised, with the following details: a roof plan; the number, angle, orientation, type, and efficiency level of*	

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	Plan (2021) Policy SI2, and Local Plan (2017) Policies SP4 and DM22. *<u>Overheating [Revised Condition 25]</u>* *Prior to the above ground commencement of the development, an updated Overheating Report shall be submitted to and approved by the Local Planning Authority. The submission shall assess the overheating risk and propose a retrofit plan. This assessment shall be based on the Energy and Overheating Assessment prepared by Meinhardt (dated 4 January 2023).* *This report shall include:* - *Updated modelling of units and corridors modelled based on CIBSE TM59, using the CIBSE TM49 London Weather Centre files for the DSY1-3 (2020s) and DSY1 for 2050s and 2080s, high emissions, 50% percentile;* - *Demonstrating the mandatory pass for DSY1 2020s can be achieved following the Cooling Hierarchy and in compliance with Building Regulations Part O, demonstrating that any risk of crime, noise and air quality issues are mitigated appropriately evidenced by the proposed location and specification of measures,* - *No active cooling is to be used on this development;* - *Modelling of mitigation measures required to pass future weather files, clearly setting out which measures will be delivered before occupation and which measures will form part of the retrofit plan (without relying on occupant adaptation measures);* - *Confirmation that the retrofit measures can be integrated within the design (e.g., if there is space for pipework to allow the retrofitting of cooling and ventilation equipment), setting out mitigation measures in line with the Cooling Hierarchy;* - *Annotated floorplans showing which spaces/dwellings have been modelled;* - *Summary tables of the modelling results.* *The development must be built in accordance with the approved overheating measures prior to the first occupation of the development and retained thereafter for the lifetime of the development.* *REASON: In the interest of reducing the impacts of climate change, to enable the Local Planning Authority to assess overheating risk and to ensure that any necessary mitigation measures are implemented prior to construction, and maintained, in accordance with London Plan (2021) Policy SI4 and Local Plan (2017) Policies SP4 and DM21.*	