

# Response to the Murphy's Yard Application ref: 2021/3225/P 20.02.22

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# 1 OBJECTION

Climate Emergency Camden strongly objects to the above planning application for the following reasons:

- 1) The proposed development has not been designed to mitigate or to adapt to climate change.
- 2) The proposed development does not make sufficient provision for nature and biodiversity.

Essentially the design of the proposed development is not in line with the policy guidance contained with London Borough Camden's Local Plan (2017) which requires the **highest feasible environmental standards** (as we explain in Section 3 below).

The planning application documents attempt to present the environmental performance of the development in a good light, whereas in fact implementation of the permitted scheme would be extremely harmful to the environment and attempts to mitigate climate change. The Environmental Impact Assessment is misleading regarding the risks associated with climate change and does not stand up to scrutiny. Eg.

'Overall, the Proposed Development contributes a very small amount to GHG emissions representing less than 0.82% of total emissions in the London Borough of Camden'.

# 2 INTRODUCTION

The configuration of the current design proposals is such that the development <u>is incapable</u> of meeting Camden's policy requirements in respect of environmental protection (see below). These matters would not be able to be addressed as part of subsequent detailed planning applications, as the inadequacy would be an integral part of the outline permitted scheme.

The requirement for a zero-carbon development was clearly set out in Camden's Kentish Town Framework, July 2020, which called for a zero-carbon development:

Zero-Carbon

The development will be zero carbon in operation, as assessed via planning policy, and emit no local combustion based pollutants such as vehicle exhaust emissions and combustion based heating systems (eg. gas boilers and CHP). The carbon dioxide emissions resulting from the construction process and materials are also of key consideration, and developments are expected to calculate whole life-cycle carbon emissions through a nationally recognised Whole Life-Cycle Carbon Assessment (eg. RICS Whole Life Carbon Assessment for the Built Environment, 2017) and demonstrate actions taken to reduce life-cycle carbon emissions.

Despite this policy objective, the proposed development is profligate in its use of materials, and the Whole Life-Cycle Carbon Assessment shows that its initial construction will result in **1.9m tonnes of C02e emissions** (between 1.874m-1.972m tonnes C02e). To put this into context, this is 200% of London Borough of Camden's entire Scope 1 and 2 emissions over a year. This is not a carbon cost that can be contemplated at this point in time when we need to be making sensible decisions about material and energy use.

Per m2, the initial construction has a carbon cost of **12,000 kg CO2e/m2** (between 11,410-12,025 kg CO2e/m2).

This is compared to Camden's current requirements of 500-600 kg CO2e/m2, and LETI's targets of 300-350kg CO2e/m2.

This scheme has not been designed with a view to reducing the carbon footprint of the actual construction, ie. CO2e emissions resulting from the manufacture of construction materials, transport and other processes (known as 'embodied carbon'). In order to make a low-energy development possible the entire configuration of the buildings needs to change, as the building massing is incompatible with low-energy design, both embodied energy and operational energy.

The 'operational energy' targets set for the scheme (for energy to heat, cool and power the buildings) are wrong. The development proposals set minimum targets based on the London Plan, Building Regulations etc. and seek to offset its inability to reach zero carbon with a one-off payment to the council. This is not acceptable as it is not effective in reducing actual CO2e emissions and mitigating climate change; a one-off payment will not compensate for years of higher carbon emissions than necessary

This leaves Camden with a development that will have produced 2 million tonnes of CO2e emissions by its completion on site and will continue to contribute each year to the borough's carbon emissions. The whole development will need to be retrofitted in the future to meet future zero carbon targets. This clearly runs counter to national policies and Camden's current existing policies.

# 3 POLICY BACKGROUND

#### **National**

The UK national political context is to achieve a 'Net Zero' carbon economy by 2050. This was passed by parliament in 2019 as a legally binding amendment to the Climate Change Act of 2008. This commitment was further updated in April 2021 by creating an interim commitment of achieving 78% carbon reductions by 2035. In December 2020 the Committee on Climate Change (CCC) published the 6th Carbon Budget which requires a 68% reduction in all carbon emissions compared to 1990 by 2030, 78% reduction by 2035, and 100% reduction by 2050. It is worth pointing out that current Building Regulations do not align with these targets. The much-delayed introduction of the Future Homes Standard in 2025 will improve building standards to further align with these ambitions. In light of the lengthy timescale of this development, with the build extending well beyond 2025, the adoption of the targets within this draft standard as a minimum is essential.

## **London Plan**

In summary, this requires developments to be net zero-carbon (Policy SI 2) and apply the energy hierarchy, and only where it is clearly demonstrated that the zero-carbon target cannot be fully achieved on site can the applicant resort to an offset payment.

## Local

Camden has through its Climate and Ecological Emergency Declaration plus a range of policy declarations demonstrated the political will to tackle the climate emergency:

- Local Plan
- Policy CC1
- Climate Action Plan
- Camden Planning Guidance

# Camden Local Plan 2017 states clearly in policy CC1 that:

"The Council will require all development to minimise the effects of climate change and encourage all developments to **meet the highest feasible environmental standards** that are financially viable during construction and occupation."

Policy on the **highest feasible environmental standards** must guide the Council in deciding what is acceptable in terms of a low carbon development, in terms of operational carbon and embodied carbon. Allowing this development to proceed without putting the applicant to proof in relation to meeting the highest feasible energy efficiency standards would be a failure to apply this duty to encourage the highest feasible environmental standards. It would also be a failure to meet London Plan targets.

# Camden's specific policies for Climate Change Mitigation in CC1 include:

- a) Promote zero cabon development and require all development to reduce carbon dioxide emissions through following the steps in the energy hierarchy.
- b) Require all major developments to demonstrate how **London Plan targets for carbon dioxide emissions have been met** (see above).
- f) Expect all development to optimise resource efficiency.

#### It is also stated:

Clause 8.3: "Any new development in Camden has the potential to increase carbon dioxide emissions in the borough. If we are to achieve local, and support national, carbon dioxide reduction targets, it is crucial that planning policy limits carbon dioxide emissions from new development wherever possible and supports sensitive energy efficiency improvements to existing buildings."

Clause 8.18 "We will expect all development to optimise resource efficiency by using materials with **low embodied carbon content**"

In addition, there are the constitutional duties relevant to all Camden cabinet Members and Councillors to:

"..protect and, if possible, enhance the natural environment to the benefit of the borough and its residents and act to mitigate and ensure resilience to climate change in recognition of the declared climate emergency."

All these policy declarations make the borough's intentions clear that development in the future needs to prevent not contribute to the climate and biodiversity breakdown, and major developments need to be as close to net zero as possible. This planning submission for the Murphy's site is in fundamental opposition to UK National policy, GLA and Camden's own Policy intentions.

## 4 OPERATIONAL ENERGY

Developers are in effect required under policy CC1 to meet the "highest feasible environmental standards that are financially viable during construction and occupation".

The following summarises the current proposals in relation to energy in use:

From the Murphy's Energy Strategy:

'With the incorporation of the ASHP and PV Array, the minimum 35% on-site reduction will be achieved for both the domestic and non-domestic elements. It is anticipated that the Proposed Development will require offsetting via a cash in lieu payment to LBC to meet the 100% carbon reduction target for both the domestic and non-domestic elements, set by the London Plan.'

#### And:

'The development follows existing guidance as below:

- Achieve BREEAM 'Excellent' rating as a minimum.
- All domestic and non-domestic development to be Net Zero Carbon (taken to mean a 100% reduction in regulated CO2 emissions from the relevant Building Regulations baseline).
- Minimum 35% on-site CO2 emissions reduction.
- Credit breakdown to ensure: 60% of the un-weighted credits are targeted within in the Energy and Water categories, and 40% in Materials.
- Minimum 15% (non-residential)/10% (residential) reduction in regulated CO2 through energy efficiency measures.
- Achieve or exceed air quality neutral standards;
- Contribute to net gain in biodiversity'

### **Compliance with future legislation:**

The applicant recognises that in 2022, with the introduction of the new Part L regulations, 'a 31% reduction over Part L 2013 is what should be targeted as a minimum to pass Part L 2020 – although further investigations will be required once the government releases the approved Building Regulations software.'

These are the <u>least</u> onerous targets available to a developer in Camden in 2022. Much more is feasible as reflected in the new Part L Regulations to be introduced and LETI Guidance. Hence, the application does not meet the plan requirements of the highest standards feasible. We are disappointed as it seems to show that the applicant has no intention of using this development to pilot high zero carbon standards to test approaches which would prove useful for future projects.

Energy targets we would recommend in line with numerous current developments for operational energy:

Using LETI (London Energy Transformation Initiative) guidance, we would recommend:

- Achieve energy use intensity targets of 35kWh/m2.yr for residential and 55kWh/m2.yr for offices
- Achieve space heating demand target of 15kWh/m2

# **Environmental design**

Environmental building design has been developed since the 1970s and requires a sophisticated approach that considers building orientation, cross ventilation, external solar shading to reduce energy use. Considerations of this type have not informed the design of the current scheme for the Murphy site. In addition there is insufficient space around and between the buildings which will contribute to the 'heat island' effect, and insufficient tree planting to contribute to cooling.

## Air Source Heat pumps

We understand the importance of air source heat pumps but believe the omission of a ground source energy system on such a large development is a mistake. This would provide more resilience and a less carbon intensive route to the electrification of heat and coolth.

### Density

Aside from townscape issues, the proposed density of the development is at odds with the targets introduced above. It is hard to offset carbon on site without ensuring that the available areas of solar radiance can offset most of the operational loads provided by the development, which a more low-rise development would address. As such, it is important to note that a future retrofit to zero carbon would be extremely hard and expensive.

# **5** EMBODIED CARBON

Camden's Local Plan, clause 8.18 "We will expect all development to optimise resource efficiency by using materials with low embodied carbon content."

The site strategy results in an unacceptably high amount of embodied carbon in the construction of the development (as confirmed in the Whole Life Carbon Assessment): between 1.874m-1.972m tonnes in total, which is between 11,410-12,025 kg CO2e/m2.

This results from a development strategy which covers the majority of the site with concrete, with basements and podiums, deep-plan commercial buildings and high-rise residential towers. The roof-top gardens and pedestrian routes require massive concrete structures. The quantities of concrete and steel are therefore extremely high:

- Sub-structure **47,625 tonnes** concrete, steel and insulation

- Structural frame **36,084 tonnes** concrete and steel

Roof structure 99,889 tonnes concrete, steel and insulation

The Environmental Impact Assessment includes no consideration of how this could be reduced by adopting a different design strategy. There is no analysis of how recycled materials can be used to reduce the embodied carbon of the cladding materials. Nor is there any analysis regards whether the buildings can be repurposed or disassembled if need changes. This is particularly an issue with shifting demands for commercial and industrial space, and it is difficult to see how those buildings with large floorplates could be repurposed for residential use.

An alternative site strategy could reduce the embodied carbon significantly, by:

- Reducing the 'footprint' of buildings
- Intelligent engineering of infrastructure requirements
- Omitting basements (which use a very large quantities of concrete)
- Omitting the heavy-weight roofs and decks (and constructing in timber and steel instead, using roofspace for PV panels)
- Reducing height of the buildings
- Using recycled/ reused materials for cladding
- Designing to allow for repurposing and disassembly

In order to assess the Whole-life Carbon of the development in a meaningful way more detailed breakdown is required to provide a separate analysis of different building types and infrastructure elements.

# Energy targets to be taken on board in line with numerous current developments:

Using LETI (London Energy Transformation Initiative) guidance, we would recommend: **Embodied carbon:** 

Less than 350 kg co2/ m2 for non-domestic Less than 300 kg co2/ m2 for domestic

It is clear that it would require a radically different approach to achieve these targets in the development of the Murphy Site, such as that outlined in the Dartmouth Park Neighbourhood Plan.

## 6 ADAPTATION TO CLIMATE CHANGE

## Climate resilience

It is not clear whether the development would be resilient enough to adapt to future climates. With many of the units being single aspect, exposed and with unshaded glazing, the design does not seem to have taken future climate considerations into account. People need to be able to live in comfort as temperatures increase.

#### **Overheating**

Before we consider future climates, we would like to also understand whether the housing has also been modelled to assess overheating. Has each unit been assessed using a methodology like TM59?

# 7 BIODIVERSITY

There are insufficient measures to protect the biodiversity on the site and adjacent to the site. More space needs to be provided on the site for genuine habitat creation.

#### **Green corridors**

The existing green corridors (trees and shrub) alongside the railway within the Murphy Site are essential for wildlife in the area and help to provide links between the four Sites of Interest for Nature Conservation adjoining the Murphy site (Hampstead Heath, Mortimer Terrace, Kentish Town City Farm and Gospel Oak railway sidings). Wildlife includes mammals like hedgehogs, bats and mice, nesting birds, frogs and toads, and a wide range of plants and insects.

In the current proposals the existing green corridors along the side of the railway are partly removed by new access roads. This is shown in the Design and Access statement, where the site sections through the existing green corridor are shown In figs. 813 (Illustrative section 1), 817 (Illustrative section 5) and 824 (Illustrative section 12). The effective width of the green corridor is reduced, which will reduce its effectiveness; the roadway immediately alongside it. The building line of the new buildings and roadway should be pulled back from the railway to enable the existing green corridors to be widened and enhanced, improving the existing nature habitats.

The new 'Heathline' is not sufficient as a green corridor for wildlife, as it is highly constrained and fragmented, and is overshadowed by the development. Nature will be constrained by the buildings and any planting is likely to be highly maintained; nature will not be permitted to take its own course. Planted roof-spaces are similarly likely to have little biodiversity value and should not be relied upon; they are likely to be omitted in future planning applications and are at best a token gesture. As previously noted, we would prefer the optimisation of the roof structure for solar PV and low-embodied carbon construction.

The Murphy's vision that the development would create 'lush green streets along the 'Heathline' and 'a generous and lush landscaped area' at the Heath Cliff cannot be achieved on such a densely constructed site with mostly high- and massive medium-rise buildings that will throw most of the ground level into shade for a large part of the day. Much of the planned greening is mostly in constrained beds and planters surrounded by concrete. Very few native plants would survive such conditions, resulting in the need for ongoing replanting and intense maintenance.

## Impact on existing biodiverse areas

We echo concerns expressed by others regarding the impact on existing green spaces, including Hampstead Heath and Kentish Town City Farm. The Environmental Impact assessment does not sufficiently assess the impact of the new buildings on these existing established areas of biodiversity. There will be harmful impacts which are glossed rather than addressed, for example overshadowing of the Farm by the residential towers.

## 8 CONCLUSION

We have highlighted the key areas of concern and have set out targets that are achievable and realistic. In accordance with Camden's policies on achieving the best that is feasible, the targets set out are not compliant with policy – it is feasible to achieve a substantially

lower carbon development through rethinking height, orientation, design and usage of materials and technology as well as ensuring the buildings are designed so they can be repurposed.

The applicant will no doubt seek to use viability assessments to reduce the environmental standards and to increase the quantity of accommodation provided. However, it appears that the applicant has over-stated the requirements in Camden and London policies for employment floorspace. Moreover, the Site Allocation Local Plan which sets the expected number of residential units has not yet been approved and CEC will be opposing this as not being consistent with a Climate Emergency which requires a greater focus on refurbishment and not high-rise housing which is inevitably high carbon.

There is great opportunity for the development of the site, but the current proposals must not be allowed to proceed. There needs to be a new approach which shows a responsible and scientific approach to the climate and biodiversity emergency.