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From Iain Shaw
Email i.shaw@maxfordham.com
Our Ref 6126/1.2.1/
Date 01 March 2018

Luke Thrumble
dp9 Ltd
100 Pall Mall
London
SW1Y 5NQ

UGLY BROWN BUILDING, ST PANCRAS WAY

Dear Luke,

I write with regard to the comments received from GLA and the responses are as follows.

We confirm that, in general, in our professional opinion the changes that the architect has made to the building form are sufficiently minor and will have no impact on the overall energy strategy as described in our original report issued in September 2017. The findings of the original assessment can be considered to be a fair reflection of the proposed amended scheme submitted to London Borough of Camden in March 2018.

The exceptions to the above statement of conformance are related to the following comments:

GLA Comments

GLA Energy 1: The demand for cooling in the non-domestic buildings will be reduced through the inclusion of solar control glazing, exposed concrete to provide additional thermal mass and louvre shading. The total site area weighted average actual and notional cooling demand for the non-domestic uses (MJ/m^2) should be provided and the applicant should demonstrate that the actual buildings' cooling demand is lower than the notional. The applicant should therefore review the and demonstrate how the cooling demand will be reduced, in line with Policy 5.9.

MF Response: Please see updated report highlighted section

GLA Energy 2: Additionally, the applicant is proposing mechanical cooling for the private dwellings. It is noted in the energy strategy that the g-value for the dwellings is at 0.63. This is considered high and the applicant should investigate reducing the g-value to reduce the overheating risk through passive measures.

MF Response: Thank you for identifying this, it is not unreasonable to provide glazing with a lower g-value than 0.63. We have amended the assessment using a g-value of 0.4 and the results are contained in the updated report highlighted section.

GLA District Heating 1: The applicant has carried out an investigation and highlighted that the Euston/Somers town network is in the vicinity of the proposed development site. The applicant has stated that the London Borough of Camden has confirmed that it would not be feasible to connect the site to the network due to the distances involved. However, no evidence of correspondence has been provided to confirm this approach. Due to the close proximity the applicant is required to provide more detail on the discussions with the network operator in order to demonstrate that connection has been fully investigated. In particular, the applicant should provide evidence to show that they have considered a potential pipe route to the nearest connection point, the approximate costs for connecting to the network, whether there is capacity to serve the development and also if the network operator has any expansion plans that would bring the network closer during the build out of the development. Evidence of correspondence should be provided.

MF Response: While we have stated that the Euston heat network is the nearest existing heat network, it is not in the vicinity, or in close proximity. Please see attached correspondence from the system operator (Camden Council) stating that they do not consider it feasible to connect to the existing Euston Network due to capacity and proximity with the Ugly Brown Building being in excess of 500m from the nearest point of connection.

On this basis that the network operator has confirmed that in their considered opinion it is unfeasible to provide a connection to our site and so it appears to be unnecessary to conduct a hypothetical investigation to connect to a system that the operator (Camden Council) will not consider appropriate in terms of capacity and distance.

GLA District Heating 2: The applicant has investigated installing a site wide heat network. However, due to phasing the applicant appears to be proposing two separate heat networks each with its own energy centre: one energy centre in Plot A/B (2019-2022) and the other in the later Plot C (in 2025). This approach would not be supported and the applicant should confirm that following full build out of the development all plots will be connected to a single site wide heat network in order to be fully connection ready (i.e. single point of connection). The applicant should also provide site plan detailing a single site wide heat network.

MF Response: Please see attached site plan, drawing A[--]101, which details that on completion of Plot C, the entire site will be supported by a single heat network to allow and single point of connection in the future. The network will connect the heating source at Plot A with that at Plot C allowing the site to function as a single system, and allow future connection to a wider district scheme from a single point. It is not yet decided if the pipework will be internal, or if it will be buried in the ground, this will be determined during the next stage of design and coordination.

GLA District Heating 3: With regard to the number of energy centres the applicant has stated that as the early plots A/B would not have sufficient space for a site wide energy centre the alternative option would be for Plots A/B to be provided by temporary gas boilers until the energy centre in Plot C is completed. However, the applicant has discounted this option as it is considered that it would require significant capital costs and be less efficient. The applicant should provide evidence to support this claim, including explaining why sufficient space for a single site wide energy centre was not allocated in Plot A or B from the outset. A drawing should be provided detailing the size of the Plot A/B energy centre with the necessary plant and any constraints.

MF Response: The proposal is designed to meet the functional, statutory and spatial and phasing needs of the plots while still meeting the district heating requirements of the Planning Policy and still minimising standing losses of long legs of pipework that would otherwise introduce an

unnecessary heat loss and associated CO_2 emission. Please see current proposed plant room drawing for Plot A, SKZA[--]001, attached.

Plot A is the first to be constructed so the first energy centre is placed in this building, that will be sufficient to serve Plots A and B. As per the comment above, the central plant sources for all plots will be interlinked for connection to a wider district heating system in the future.

The footprint of this building is the smallest and so space is limited for plant, and other needs within the building, Including other plant space, cycle parking, and commercial unit back of house areas. This limits the area available for central plant that would serve other buildings. Please see attached drawings SKZA[--]002, attached. Including all the plant for Plot A, B and C would result in one of the commercial units losing all of its back of house basement service/storage space, and another losing half of its space. This change seriously limits the practical functionality of both spaces.

The proposal to provide temporary boilers in Plot A to serve Plot A and Plot B from 2019 until 2025 when Plot C is proposed to be complete is not viable for a number of reasons:

1. The abortive costs of such a proposal. Please see letter by the project Quantity Surveyor with regard to providing temporary boilers, attached
2. The carbon dioxide impact. Replacing a carbon efficient CHP unit with less carbon efficient temporary boilers for a minimum of six years of the buildings life would appear to be contrary to the aims and intent of the Planning Policy and clearly have a negative impact on the carbon emissions.

GLA Combined Heat and Power: The applicant is proposing to install a gas fired CHP units: a 240kWe/370kWth CHP engine for Plots A/B and a 450kWe/482kWth Plot C. As outlined above the applicant should first prioritise connection to the existing network over an on-site solution. The applicant should also further investigate a single energy centre this would potentially reduce the number of CHP engines required (if connection to the DH is not possible), which should also generally have a greater CO_2 saving potential.

Both of these comments are addressed above, there is not currently an existing system in the vicinity, with the capacity to connect the proposed building to. The size and phasing of the building do not permit a single energy centre in the initial phase, however on completion the two centres will be interlinked, meeting the requirements of the site being served by a single district heating system.

CHP units, together with thermal storage have been sized and selected to maximise run time to reduce carbon dioxide emissions.

Yours sincerely,

Iain Shaw

Incoming Email
from
Jennifer.Belk@camden.gov.uk
on
15/07/2016 17:02

Create Mail Reply

File Ref 1 Planning Officer
File Ref 2
File Ref 3

To: "i.shaw@maxfordham.com" <i.shaw@maxfordham.com>
Subject: FW: St Pancras Way - feasibility study

Associated Documents

created by: **Iain Shaw** on **15-Jul-16**

Hello Iain,

Apologies for the delay in coming back to you.

In terms of the below investigation, my current view is that it would not be possible in terms of distance (500m from the development) and capacity for the Somers Town Energy network to connect to the Ugly Brown building development on St Pancras Road.

Your secondary suggestion of 'providing a central District Heating plant that could serve the local community' would be a realistic proposition and one that Camden are happy to discuss with you at any time.

Kind regards,

Jen

Jennifer Belk
Senior Sustainability Officer (Low Carbon Energy)

Telephone: 020 7974 5657

From: Lopez, Ana
Sent: 23 June 2016 10:13
To: I.Shaw@maxfordham.com
Cc: Belk, Jennifer
Subject: RE: St Pancras Way - feasibility study

Hi Iain,

Thanks for your email. I've copied in Jen who leads on the decentralised energy strategy for the borough – she's been on leave the last couple of weeks so will respond to you soon to discuss this.

Many thanks,

Ana Lopez
Sustainability Officer

Telephone: 020 7974 5011

From: I.Shaw@maxfordham.com [mailto:I.Shaw@maxfordham.com]
Sent: 23 June 2016 10:08
To: Lopez, Ana
Subject: St Pancras Way - feasibility study

Hi Ana,

I have been advised by our client (Reef Developments) that you are the Sustainability Officer for the proposed works on St Pancras Way to the Ugly Brown Building occupied by Ted Baker and Verizon.

We are the Mechanical and Electrical Consultants and also the Sustainability Consultants for the project.

I understand you have already meet the client team and architects for a pre-app meeting. Our first task is to assess the feasibility of connecting to an existing heat network and so we would like to investigate the feasibility of connecting to Camdens networks that also serves Central Somers Town.

We would like to investigate the cost of connection and also the heating capacity of the current network. Conversely to connecting to an existing network we will also be investigating the opportunities of providing a central District Heating plant that could serve the local community.

Could you advise who I can contact at Camden with regard to this investigation?

Thanks in advance,

Iain Shaw

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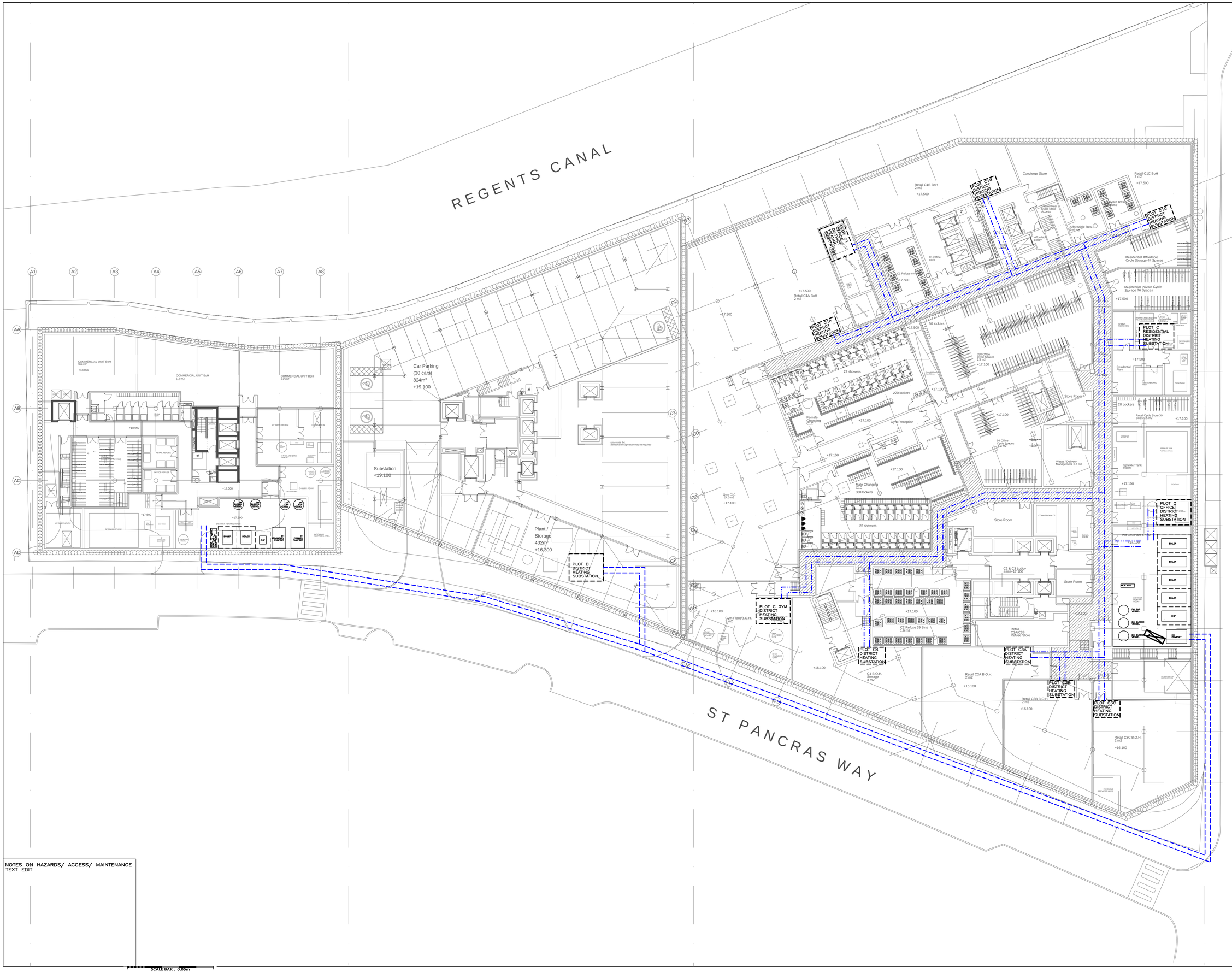
NOTES:

1. DO NOT SCALE FROM THIS DRAWING



NOTES ON HAZARDS/ ACCESS/ MAINTENANCE
TEXT EDIT

SCALE BAR : 0.05m

rev	date	description	eng
*	26/02/18	FOR PLANNING	IJS

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architect
BENNETTS ASSOCIATES ARCHITECTS

job title
UGLY BROWN BUILDING PANCRAS WAY

project leader	date	scale (at A1)
IJS	FEB '18	1:250

drawing title
COMMUNITY HEATING SYSTEM SITE PLAN

job no	dwg no	rev
J6126	A[--]101	/*

NOTES:

1. DO NOT SCALE FROM THIS DRAWING

A1 A2 A3 A4 A5 A6 A7 A8

AA AB AC AD

COMMERCIAL UNIT BoH
3.6 m2

+18.000

COMMERCIAL UNIT BoH
1.2 m2

COMMERCIAL UNIT BoH
1.2 m2

Car Parkii
(30 cars)
824m²
+19.100

car park vent

Drying room

+18.000

LV SWITCHROOM

COMMS ROOM

LTHW AND DHW ROOM

MCP

LTHW PUMPSET

LTHW EX VESSEL

CHILLER ROOM

LTHW HX

DHW HX

Substation
+19.100

40 42

Cycle Parking
124 spaces
(London Plan incl retail)

RETAIL REFUSE

OFFICE REFUSE

42

600ø BOILER FLUE TO ABOVE

300ø CHP FLUE TO ABOVE

+18.000

CORRIDOR VENT

DH BUFFER VESSEL

DH BUFFER VESSEL

DH EXP VESSEL

DH EXP VESSEL

SPRINKLER PUMPSET

+17.500

HV SUBSTATION

SPRINKLER TANK

DCM PUMPSET

DCW TANK

MCP

DISTRICT HEATING ROOM

BOILER

BOILER

CHP

DH SECONDARY PUMPSET

DH PRIMARY PUMPSET

INCOMING SERVICES AREA

700X600 SMOKE EXTRACT DUCT

NOTES ON HAZARDS/ ACCESS/ MAINTENANCE

SCALE BAR : 0.05m

rev	date	description	eng
A	26/02/18	FOR PLANNING	JAH
*	01/03/17	FOR INFORMATION	JAH

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architect
BENNETTS ASSOCIATES

job title
UGLY BROWN BUILDING
PLOT A

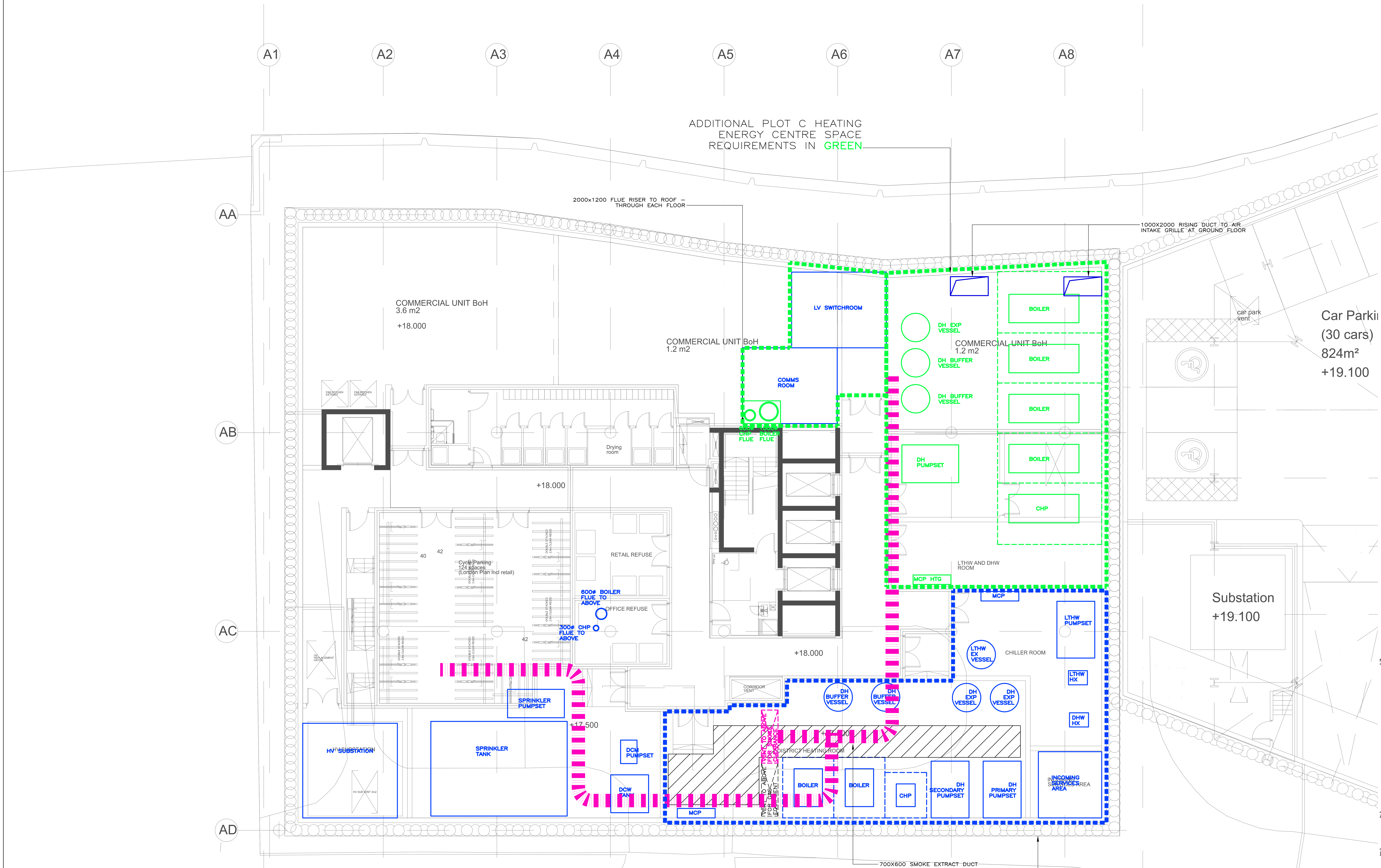
project leader	date	scale (at A1)
IJS	JAN '17	1:100

drawing title
BASEMENT PLANT LAYOUT
PLOT A

job no	dwg no	rev
J6126	SKZ[--]A001	A

NOTES:

1. DO NOT SCALE FROM THIS DRAWING



A1
A2
A3
A4
A5
A6
A7
A8
AA
AB
AC
AD
ADDITIONAL PLOT C HEATING ENERGY CENTRE SPACE REQUIREMENTS IN GREEN
2000x1200 FLUE RISER TO ROOF – THROUGH EACH FLOOR
1000X2000 RISING DUCT TO AIR INTAKE GRILLE AT GROUND FLOOR
COMMERCIAL UNIT BoH
3.6 m2
+18.000
COMMERCIAL UNIT BoH
1.2 m2
LV SWITCHROOM
COMMS ROOM
DH EXP VESSEL
DH BUFFER VESSEL
DH BUFFER VESSEL
COMMERCIAL UNIT BoH
1.2 m2
BOILER
BOILER
BOILER
BOILER
CHP
DH PUMPSET
CHP FLUE
BOILER FLUE
Drying room
+18.000
Car Parking
(30 cars)
824m²
+19.100
car park vent
Cycle Parking
124 spaces
(London Plan incl retail)
RETAIL REFUSE
600ø BOILER FLUE TO ABOVE
OFFICE REFUSE
300ø CHP TO FLUE TO ABOVE
LTHW AND DHW ROOM
MCP HTG
MCP
Substation
+19.100
LTHW PUMPSET
LTHW EX VESSEL
CHILLER ROOM
LTHW HX
+18.000
CORRIDOR VENT
DH BUFFER VESSEL
DH BUFFER VESSEL
DH EXP VESSEL
DH EXP VESSEL
DHW HX
SPRINKLER PUMPSET
+17.500
HV SUBSTATION
SPRINKLER TANK
DCW PUMPSET
DCW TANK
DISTRICT HEATING ROOM
BOILER
BOILER
CHP
DH SECONDARY PUMPSET
DH PRIMARY PUMPSET
INCOMING SERVICES AREA
MCP
700X600 SMOKE EXTRACT DUCT
PLOT A&B HEATING ENERGY CENTRE IN BLUE

NOTES ON HAZARDS/ ACCESS/ MAINTENANCE

SCALE BAR : 0.05m

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A	26/02/18	FOR PLANNING	JAH
•	01/03/17	FOR INFORMATION	JAH

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architect
BENNETTS ASSOCIATES

job title
UGLY BROWN BUILDING
PLOT A

project leader	date	scale (at A1)
IJS	JAN '17	1:100

drawing title
BASEMENT PLANT LAYOUT
PLOT A - ALL PLANT FOR ALL PLOTS

job no	dwg no	rev
J6126	SKZ[--]A002	A

GT GARDINER &THEOBALD

DP9 Ltd
Luke Thrumble
100 Pall Mall
St James
London
SW1Y 5NQ

Our Ref: PAH/PRE/AJL/34340
6 March 2018

Dear Luke

Ugly Brown Building

We write with regard to the comments received from Camden Council and the GLA in relation to the proposed District Heating Strategy.

Attached are detailed estimated construction costs for 3 proposed options. In summary, these are:

1. Base Option – separate energy centre for Plot A&B and Plot C
2. Temporary boilers for Plot A&B followed by a permanent combined energy centre for Plots A, B & C, housed in Plot C.
3. Permanent combined energy centre for Plot A, B & C housed in Plot A.

Constructions costs for Option 1, the base option, have been included in the scheme viability proposal and have been reviewed and agreed with BPS, Camden's independent viability assessors.

Option 2, temporary boilers, has an additional capital cost of nearly £1.4m and results in a significant amount of plant and equipment being stripped out and disposed of after a very short period of use.

Option 3, one large energy centre in Plot A, has an additional capital cost of circa £440,000. In addition, there is loss of both retail and office net area to accommodate additional flues. Loss of basement retail area to accommodate the energy centre plant for Plot C. Additional lifecycle costs, running and maintenance costs for the early installation of the Plot C energy centre. For clarity, these additional costs and loss of net area cost would be over and above the £440,000 capital cost uplift. Furthermore the additional loss of basement back of house retail area will impact the building service strategy required to meet the Local Authority requirements.

Yours Sincerely

PP

Paul Eldred
Partner
for Gardiner & Theobald LLP