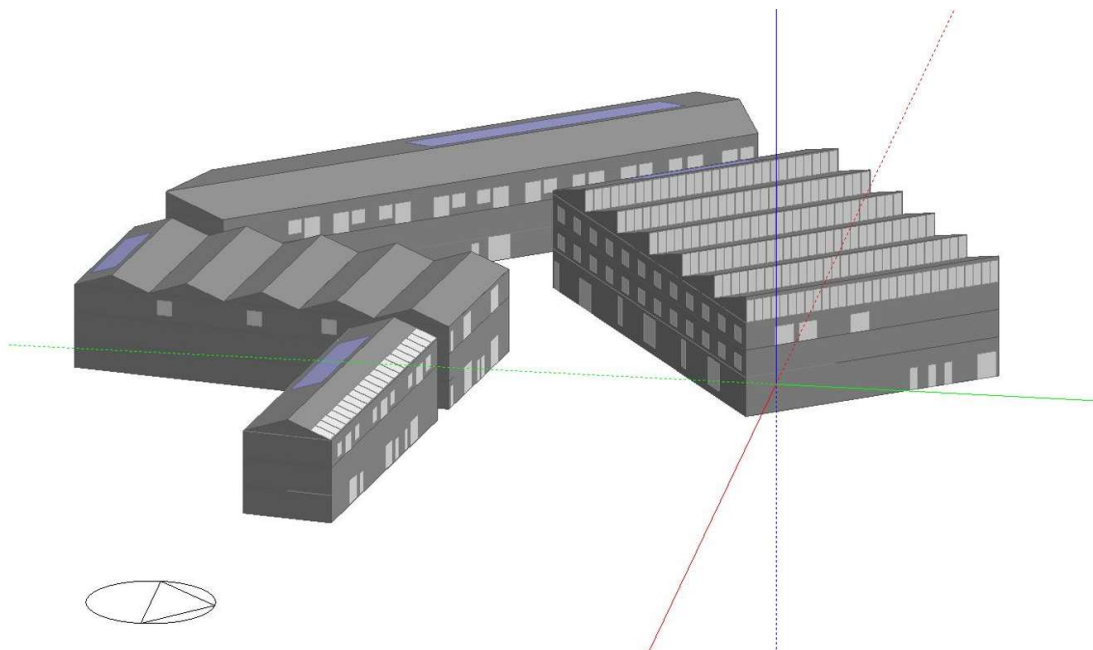




FLORENTIA VILLAGE
VALE ROAD
LONDON
N4 1TD

District Energy Network Report
[Planning Condition 14]



David Webb Associates Ltd
Friary Court,
13-21 High Street,
Guildford,
GU1 3DG

Client: Florentia Property Unit Trust
c/o General Projects
55 Blandford Street
London
W1U 7HW

Project: Florentia Village
Vale Road
London
N4 1TD

Project reference: 21066

Rev	Date	Author	Checked	Notes
00	06-07-2023	NB	DGW	First Issue
01	24-08-2023	NB	DGW	Title revised; this DEN section reissued as separate report from condition 13(a) elements which are covered elsewhere.



CONTENTS

1 INTRODUCTION 4

2 RESPONSES..... 5

 2.1 Condition 14(a) 5

 2.2 Condition 14(b) 5

 2.3 Condition 14(c)..... 5

 2.4 Condition 14(d) 5

 2.5 Condition 14(e) 6

 2.6 Condition 14(f) 6

 2.7 Condition 14(g) 6

 2.8 Condition 14(h) 6

APPENDIX 1 – PLANT ROOM DRAWING 7

APPENDIX 2 – INCOMING SERVICES DRAWING 8

APPENDIX 3 – PLANT ROOM SCHEMATIC..... 9

1 INTRODUCTION

This report relating to Florentia Village development (reference HGY/2022/0044) has been prepared to address conditions 14(a-h) of the planning consent notice as reproduced below:

Prior to commencement of above ground construction works, details relating to the future connection to the DEN shall be submitted to and approved by the Local Planning Authority. This shall include:

- a) 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.);*
- b) Peak heat load calculations in accordance with CIBSE CP1 Heat Networks: Code of Practice for the UK (2020) taking account of diversification.*
- c) 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;*
- d) 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;*
- e) 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;*
- f) Details of the location for building entry including dimensions, isolation points, coordination with existing services and detail of flushing/seals;*
- g) 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; and*
- h) Details of a future pipework route from the temporary boiler location to the plant room.*

Each element is discussed, and where applicable supporting information is supplied.

2 RESPONSES

2.1 Condition 14(a)

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.);

Although provisions are included to allow this development to connect to a District Energy Network, the design, installation and operation of the DEN itself is the responsibility of others.

It is the DEN team, as part of their design process, that that will be required to demonstrate the key performance objectives as detailed in CIBSE Code of Practice 1.

This condition is not considered relevant to this development.

2.2 Condition 14(b)

Peak heat load calculations in accordance with CIBSE CP1 Heat Networks: Code of Practice for the UK (2020) taking account of diversification.

These calculations are the responsibility of the DEN design team, which is not part of this development.

This condition is not considered relevant to this development.

2.3 Condition 14(c)

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;

These details are the responsibility of the DEN design team, which is not part of this development.

This condition is not considered relevant to this development.

2.4 Condition 14(d)

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

The Project has been developed to allow the simultaneous connection of the on-site heating system (gas fired boiler plant) and a district heating substation.

This is shown on the plant room arrangement drawing 21066-L-50-01-C1, and is included as appendix 1.

2.5 Condition 14(e)

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

The routes for primary pipework are indicated on the drawing 21066-L-50-00-C1, attached as appendix 2.

This includes a connection chamber close to the boundary line to minimise on-site disruption during connection and commissioning.

Co-ordination with existing services will be undertaken once site excavation works are under way, as it is not possible to investigate these while the site and pavement are in public use.

2.6 Condition 14(f)

Details of the location for building entry including dimensions, isolation points, coordination with existing services and detail of flushing/seals

These details are indicated on the plant room drawing 21066-L-50-01-C1 (appendix 1) and plant room schematic 21066-S-50-01-C1 (appendix 3).

The schematic includes a typical representation of a district heating sub-station, and a more developed design would be expected once the DEN design team were engaged to arrange connection.

2.7 Condition 14(g)

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

The Project has been designed to accommodate onsite heat generation and a DEN substation simultaneously, and may operate from either or both.

Refer to drawings 21066-L-50-01-C1 (appendix 1) and 21066-S-50-01-C1 (appendix 3).

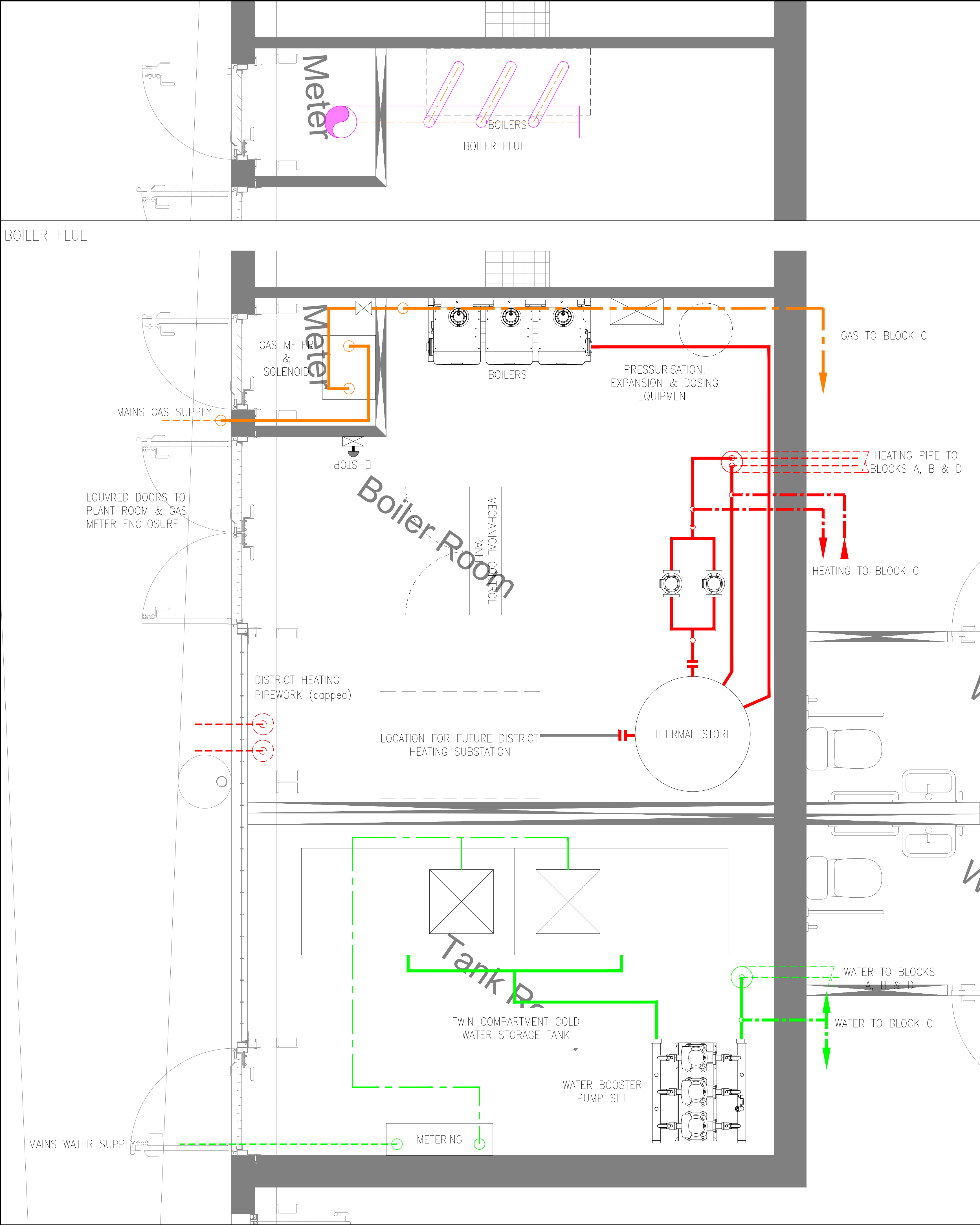
2.8 Condition 14(h)

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

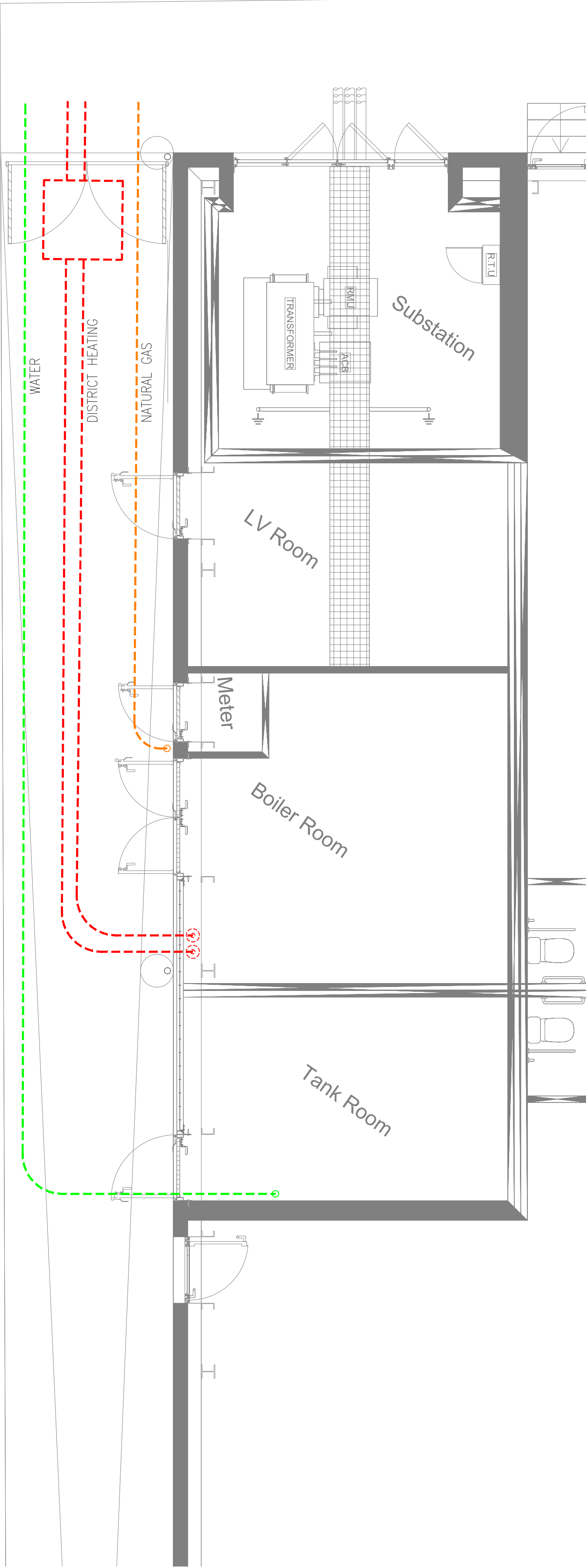
The Project has been designed to accommodate onsite heat generation and a DEN substation simultaneously with no significant disruption to operations when the DEN is connected.

Refer to drawings 21066-L-50-01-C1 (appendix 1) and 21066-S-50-01-C1 (appendix 3).

APPENDIX 1 – PLANT ROOM DRAWING



LOCATION PLAN (1/50)



This drawing was produced using CAD and on no account should be amended by hand.
This drawing should not be scaled from.
All dimensions shown are for reference and should be checked on site prior to commencement of work.

NOTES
DRAWING IS DETAILED TO BSRIA STAGE 4A FOR ADOPTION BY CONTRACTOR UNDER A DESIGN & BUILD CONTRACT

C2	16-01-23	REVISED TO SUIT NEW LAYOUT	NB	DG	DGW
C1	13/10/22	CONTRACT ISSUE- STAGE 4A	NB	DG	DGW
REV	DATE		DRAWN	CHKD	APPRD



David Webb Associates Ltd
Building Services Consulting Engineers
Friary Court, 13-21 High Street
Guildford, Surrey GU1 3DG

t01483 948770
www.davidwebbassociates.com

CLIENT
GENERAL PROJECTS

PROJECT
FLORENTIA VILLAGE
VALE ROAD, HARINGEY
LONDON N4 1TD

Drawing Title
**PLANT ROOM GENERAL
ARRANGEMENT**

Drawn NB	Date 01-22	Checked By DGW	Approved By DGW
Status CONTRACT ISSUE	Scale 1/20 @ A1	Drawing Number 21066-L-50-01	Revision C2

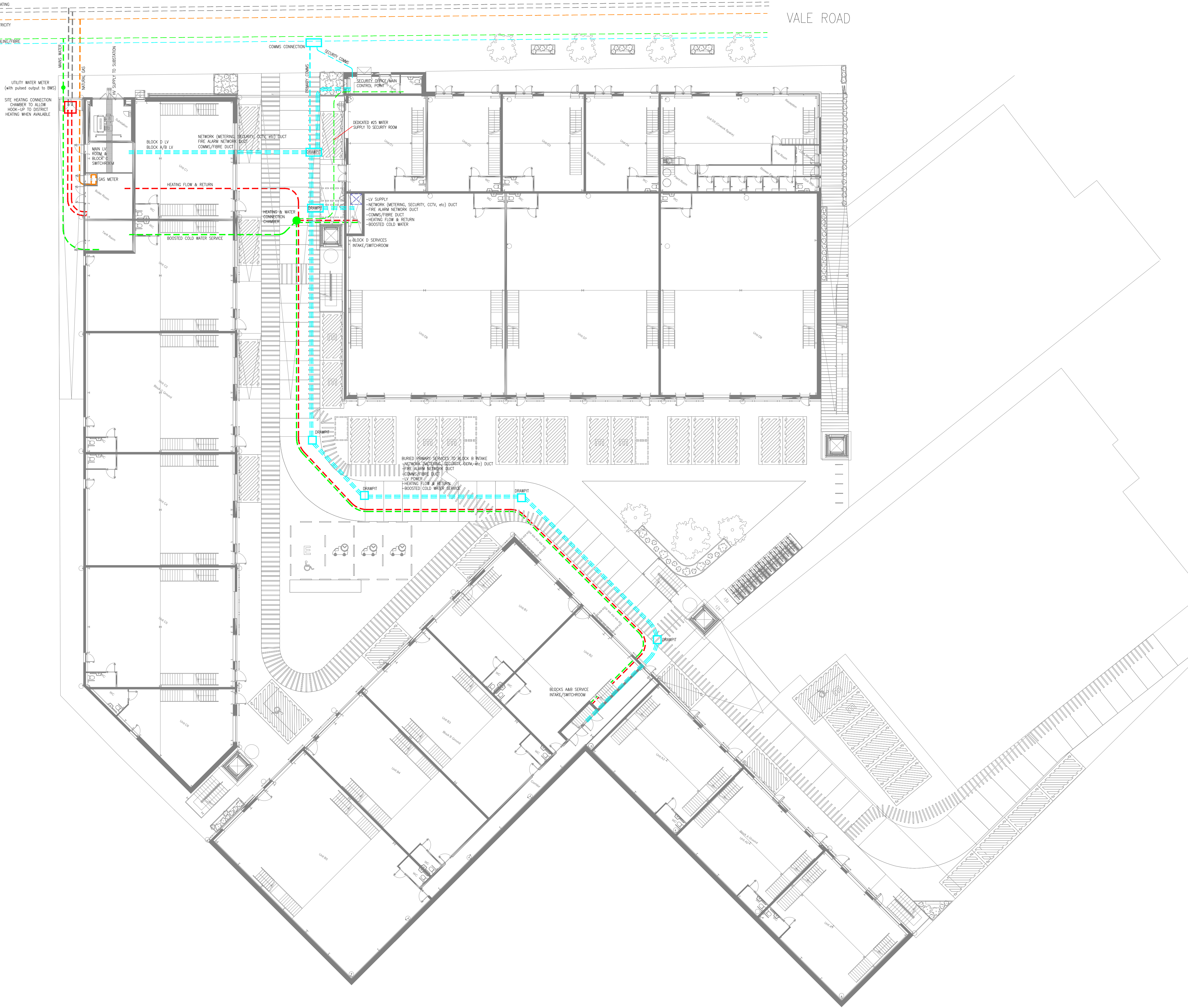
APPENDIX 2 – INCOMING SERVICES DRAWING

VALE ROAD

UTILITIES IN ROAD ARE INDICATIVE
& REQUIRE SURVEY

FUTURE DISTRICT HEATING
NATURAL GAS
HIGH VOLTAGE ELECTRICITY
WATER
COMMUNICATIONS CABLES/FIBRE

VALE ROAD



This drawing was produced using CAD and on no account should be amended by hand.
This drawing should not be scaled from.
All dimensions shown are for reference and should be checked on site prior to commencement of work.

NOTES

DRAWING IS DETAILED TO BSRIA STAGE 4A FOR ADOPTION BY CONTRACTOR UNDER A DESIGN & BUILD CONTRACT

C2	16/01/23	BURIED SERVICES ADJUSTED TO SUIT REVISED PLANT & SWITCH-ROOM ARRANGEMENT	NB	DG	DGW
C1	13/10/22	CONTRACT ISSUE- STAGE 4A	NB	DG	DGW
REV	DATE		DRAWN	CHKD	APPRD



David Webb Associates Ltd
Building Services Consulting Engineers
Friary Court, 13-21 High Street
Guildford, Surrey GU1 3DG
t:01483 948770
www.davidwebbassociates.com

CLIENT
GENERAL PROJECTS

PROJECT
FLORENTIA VILLAGE
VALE ROAD, HARINGEY
LONDON N4 1TD

Drawing Title
**INCOMING & PRIMARY
BURIED SERVICES**

Drawn NB	Date 01-22	Checked By DGW	Approved By DGW
Status CONTRACT ISSUE	Scale 1/200 @ A1		
Drawing Number 21066-L-50-00			Revision C2

APPENDIX 3 – PLANT ROOM SCHEMATIC

GENERAL NOTES

- KEY

- 
- DWA**
BUILDING SERVICES CONSULTING ENGINEERS

Drawn NB	Date 01-22	Checked By DGW	Approved By DGW
Status CONTRACT ISSUE		Scale nts @ A1	
Drawing Number 21066-S-50-01			Revision C2