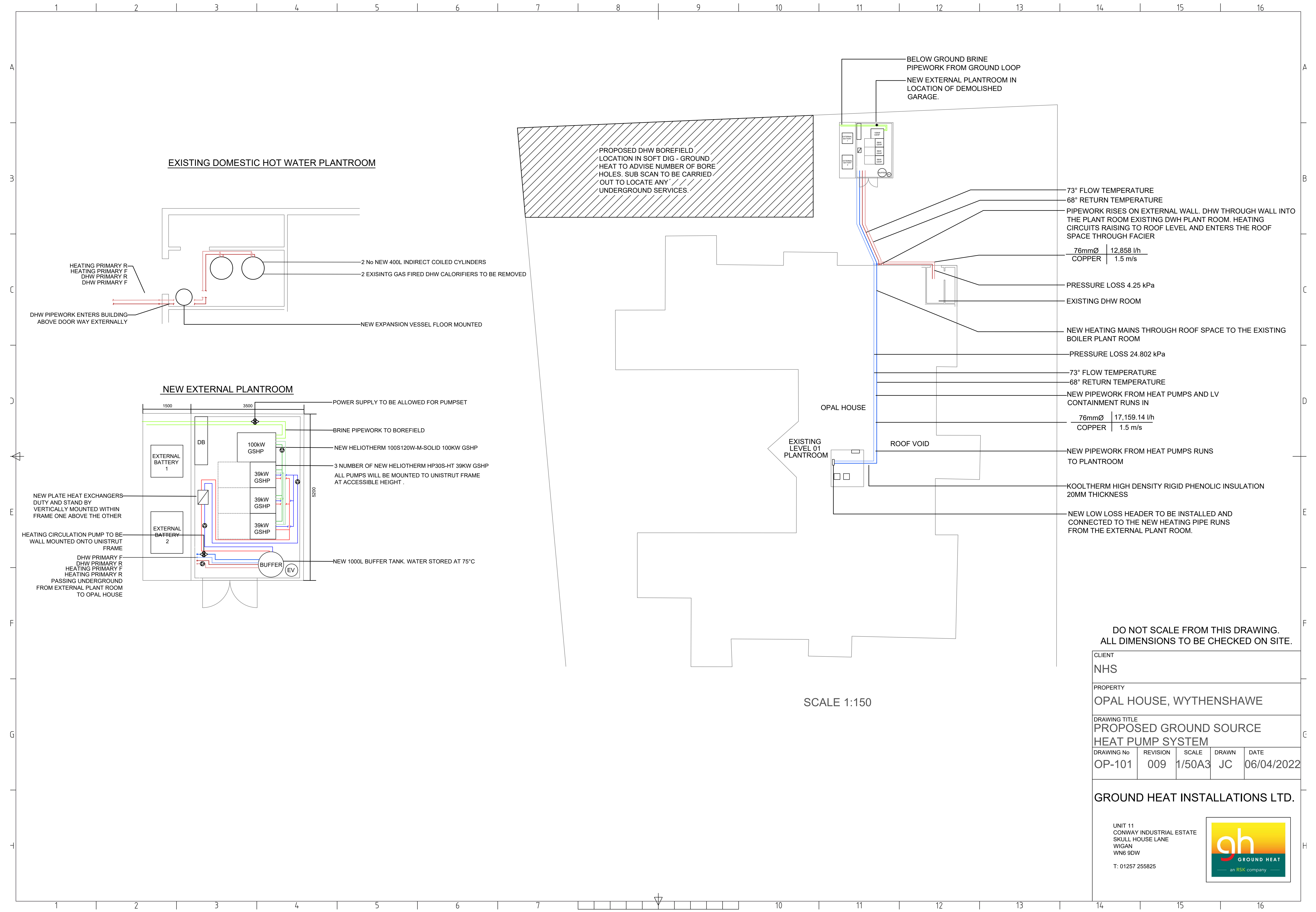




1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

A

3

C

D

E

F

G

H

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

EXISTING DOMESTIC HOT WATER PLANTROOM

HEATING PRIMARY R
HEATING PRIMARY F
DHW PRIMARY R
DHW PRIMARY F

DHW PIPEWORK ENTERS BUILDING
ABOVE DOOR WAY EXTERNALLY

2 No NEW 400L INDIRECT COILED CYLINDERS

2 EXISINTG GAS FIRED DHW CALORIFIERS TO BE REMOVED

NEW EXPANSION VESSEL FLOOR MOUNTED

NEW EXTERNAL PLANTROOM

1500 3500 5200

EXTERNAL BATTERY 1

DB

100kW GSHP

39kW GSHP

39kW GSHP

39kW GSHP

EXTERNAL BATTERY 2

NEW PLATE HEAT EXCHANGERS
DUTY AND STAND BY
VERTICALLY MOUNTED WITHIN
FRAME ONE ABOVE THE OTHER

HEATING CIRCULATION PUMP TO BE
WALL MOUNTED ONTO UNISTRUT
FRAME

DHW PRIMARY F
DHW PRIMARY R
HEATING PRIMARY F
HEATING PRIMARY R
PASSING UNDERGROUND
FROM EXTERNAL PLANT ROOM
TO OPAL HOUSE

POWER SUPPLY TO BE ALLOWED FOR PUMPSET

BRINE PIPEWORK TO BOREFIELD

NEW HELIOTHERM 100S120W-M-SOLID 100KW GSHP

3 NUMBER OF NEW HELIOTHERM HP30S-HT 39KW GSHP
ALL PUMPS WILL BE MOUNTED TO UNISTRUT FRAME
AT ACCESSIBLE HEIGHT .

NEW 1000L BUFFER TANK. WATER STORED AT 75°C

PROPOSED DHW BOREFIELD
LOCATION IN SOFT DIG - GROUND
HEAT TO ADVISE NUMBER OF BORE
HOLES. SUB SCAN TO BE CARRIED
OUT TO LOCATE ANY
UNDERGROUND SERVICES.

BELOW GROUND BRINE
PIPEWORK FROM GROUND LOOP

NEW EXTERNAL PLANTROOM IN
LOCATION OF DEMOLISHED
GARAGE.

73° FLOW TEMPERATURE
68° RETURN TEMPERATURE

PIPEWORK RISES ON EXTERNAL WALL. DHW THROUGH WALL INTO
THE PLANT ROOM EXISTING DHW PLANT ROOM. HEATING
CIRCUITS RAISING TO ROOF LEVEL AND ENTERS THE ROOF
SPACE THROUGH FACIER

76mmØ | 12,858 l/h
COPPER | 1.5 m/s

PRESSURE LOSS 4.25 kPa

EXISTING DHW ROOM

NEW HEATING MAINS THROUGH ROOF SPACE TO THE EXISTING
BOILER PLANT ROOM

PRESSURE LOSS 24.802 kPa

73° FLOW TEMPERATURE
68° RETURN TEMPERATURE

NEW PIPEWORK FROM HEAT PUMPS AND LV
CONTAINMENT RUNS IN

76mmØ | 17,159.14 l/h
COPPER | 1.5 m/s

NEW PIPEWORK FROM HEAT PUMPS RUNS
TO PLANTROOM

KOOLTHERM HIGH DENSITY RIGID PHENOLIC INSULATION
20MM THICKNESS

NEW LOW LOSS HEADER TO BE INSTALLED AND
CONNECTED TO THE NEW HEATING PIPE RUNS
FROM THE EXTERNAL PLANT ROOM.

OPAL HOUSE

EXISTING LEVEL 01
PLANTROOM

ROOF VOID

SCALE 1:150

DO NOT SCALE FROM THIS DRAWING.
ALL DIMENSIONS TO BE CHECKED ON SITE.

CLIENT
NHS

PROPERTY
OPAL HOUSE, WYTHENSHAW

DRAWING TITLE
PROPOSED GROUND SOURCE
HEAT PUMP SYSTEM

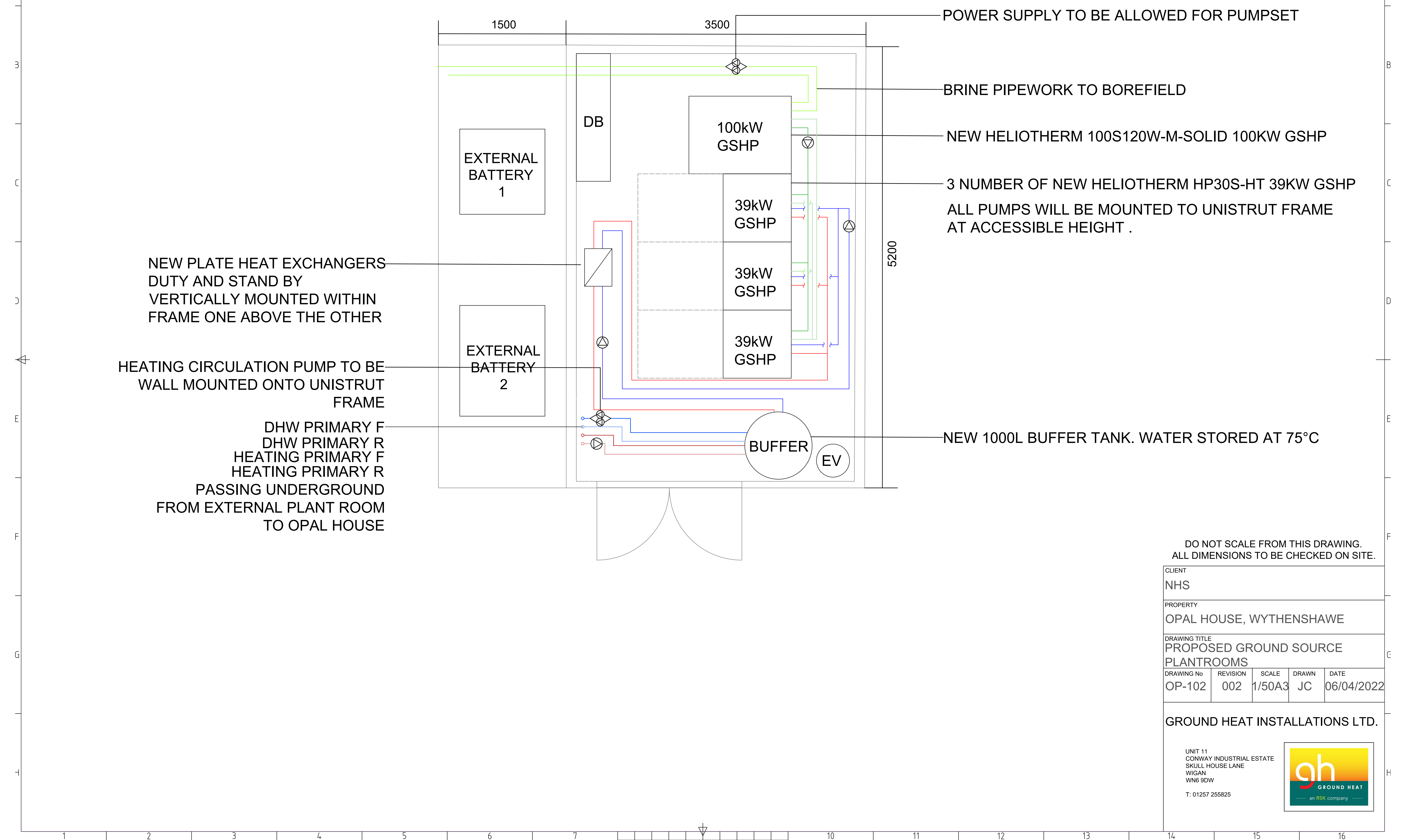
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OP-101	009	1/50A3	JC	06/04/2022

GROUND HEAT INSTALLATIONS LTD.

UNIT 11
CONWAY INDUSTRIAL ESTATE
SKULL HOUSE LANE
WIGAN
WN6 9DW
T: 01257 255825

gh
GROUND HEAT
an RSK company

NEW EXTERNAL PLANTROOM



DO NOT SCALE FROM THIS DRAWING.
ALL DIMENSIONS TO BE CHECKED ON SITE.

CLIENT				
NHS				
PROPERTY				
OPAL HOUSE, WYTHENSHAW				
DRAWING TITLE				
PROPOSED GROUND SOURCE PLANTROOMS				
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