

Notes:

- Control system Honeywell EVOHOME.
- Spare Connection provided for future extension.
- Unvented 300L cylinder safety devices and EXP vessel not shown.
- T7 & T8 are floor sensors for Commissioning / Test only.

A.A.V = Automatic Air Vent

Imm = Immersion

DCW = Domestic Cold Water

DHW = Domestic Hot Water

P&T = Pressure and Temperature

PRV = Pressure Relief Valve

GSHP = Ground Source Heat Pump

UFH = Under Floor Heating

- T1 STAT = N.O, Set 45°C.
- T2 STAT = N.C, Set 85°C.
- T3 STAT = N.C, Set 45°C.
- T4 STAT = N.C, Set 80°C.
- T6 STAT = N.C, Set 35°C (match set point of GSHP).
- T9 STAT = N.C, Set 65°C.

Stove control

V1 = N.O. MOV

If (T1 > 45°C & T4 < 80°C)
Pump P1 = ON, V1 = CLOSES;

If (T2 > 85°C)
V1 = OPEN;

If Power Fails,
V1 opens the gravity loop.

Heating Control

EVOHOME controls the manifolds from wireless room stats.

The ESBE Mixer valve controls the UFH Flow to 35°C via its T5 sensor.

When demand from a UFH zone is called,
P3 (UFH Pump) = ON.

If (T6 < 35°C) GSHP = ON;*

*This logic allows stored hot water in the buffer to be used first. If the stove is heating the buffer, the GSHP will not come on.

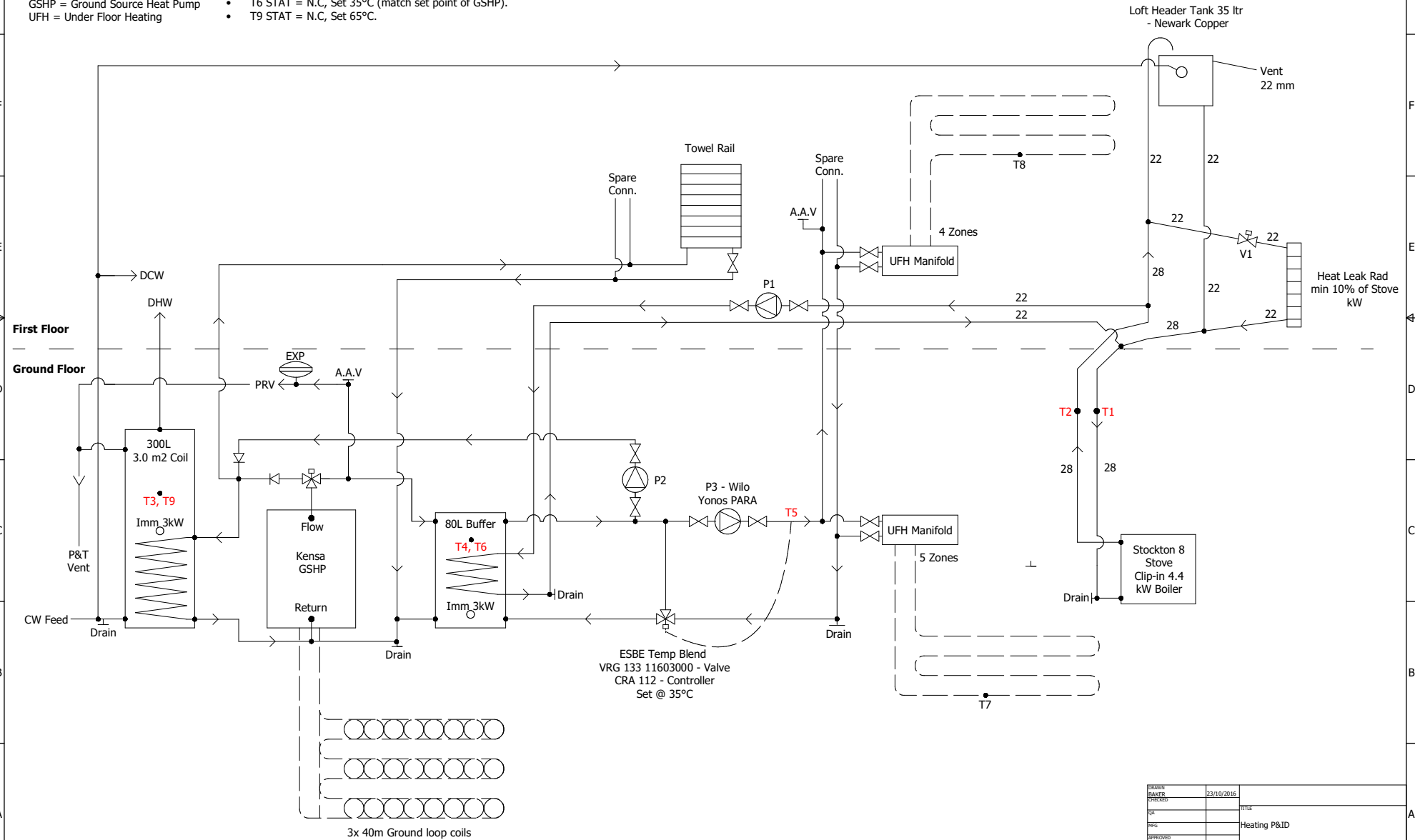
DHW Control

Immersion, purge to 65°C once per week.

If (T3 < 45°C) *And DHW timer is calling
Then If (P2 = OFF) GSHP = ON;

If (T4 > 80°C) *At any time

Then If (T9 < 65°C) P2 = ON; *to transfer stove heat to DHW



DESIGNED	23/10/2016	TITLE	
CHECKED		HEATING P&ID	
DATE		SIZE	
REVISED		MASTER	
SCALE		SHEET	3