

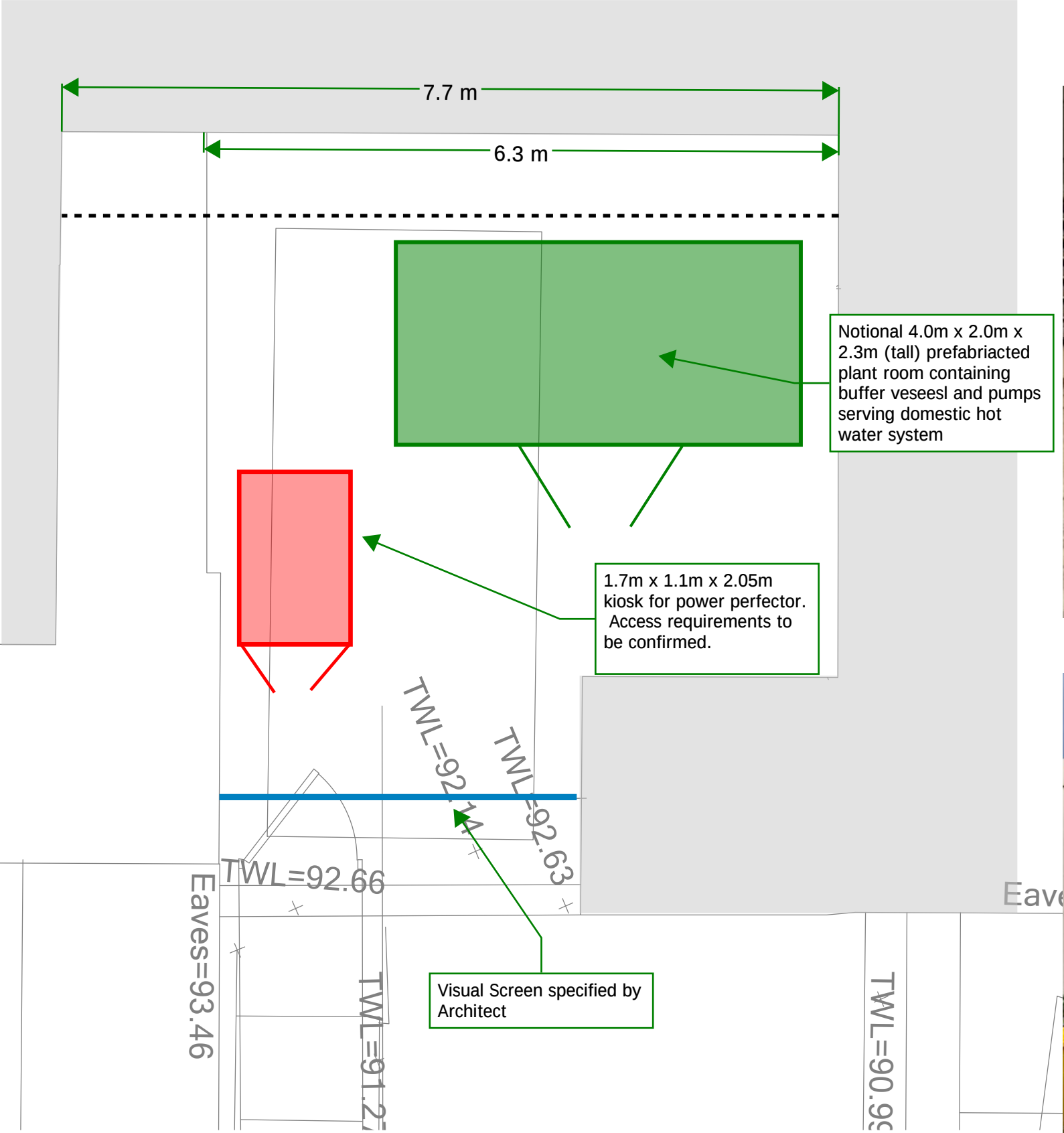
Whatley Manor Hotel

Proposed ASHP Acoustics Info

27 Aug 2026

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Whatley Manor Hotel
Refrigeration pack zone (Area 1)



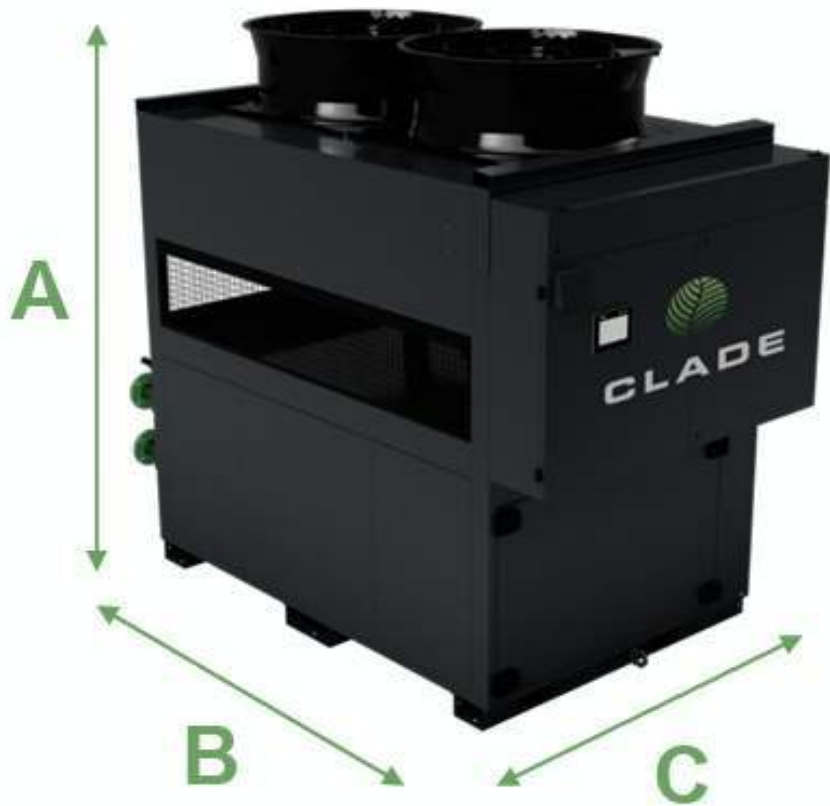
System 3 (Hotel Heating) & System 4 (Cooling)



Whatley Manor Hotel

System 2 (Spa Htg), System 3 (Hotel Heating) & System 4 (Cooling)

Clade Rown 2 Low Noise ASHP (reversible)



Heating Mode

System Sound Data in accordance with BS EN ISO 4871:2009

Octave Band Centre Frequency (Hz)	63	125	250	500	1000	2000	4000	8000	Lin	(A)
Sound Power Level, Lw (Reference 1 x 10 ⁻¹² watts), dB (4)(5)(7)	79	80	67	64	60	54	50	42	85	68
Uncertainty, Uwa, dB	6	5	4	4	3	3	3	2	-	4
Sound pressure level at 10m, Lp(a) (reference 20 x 10 ⁻⁶ pascals), dBA (6)										36
-5°C Ambient Sound Data? ☐										
50% Fan Speed? ☐										

Disclaimer:

- (1) COP / EER figures provided in this table are calculated in line with EN14511 (SCOP/SEER in line with EN14825) at the stated ambient conditions and design water flow and return temperatures. Figures shown relate to specific design conditions which in physical application may vary significantly due to changes and fluctuations in conditions such as ambient temperature, humidity and fluctuations to system temperatures, flow rates etc. As such all COP / EER figures are subject to variation and should be taken as maximum achievable instantaneous figures at the design condition.
- (2) Data presented above is correct on date of issue. Performance data is subject to change at the discretion of Clade Engineering Systems Ltd.
- (3) Data presented above should not be shared with third parties without the written consent of Clade Engineering System Ltd.
- (4) The sum of a measured noise emission value and its associated uncertainty represents an upper boundary of the range of values which is likely to occur in measurements
- (5) The sound levels refer to a unit operating under conditions that guarentee a thermal capacity equal to that declared at an outdoor air temperature of 7°C DB (6°C WB), according to EN 14825:2022
- (6) Assumed 10m parallelpiped sound propagation
- (7) Reported in accordance with BS EN ISO 4871: 2009 - Acoustics. Declaration and verification of noise emission values of machinery and equipment

Unit	Height 'A' (mm)	Length 'B' (mm)	Depth 'C' (mm)
Rowan 2	2636	2400	1700

ACCESS			
Minimum free space side	mm	1000	1000
Minimum free space front	mm	1000	1000
Minimum free space back	mm	1000	1000
Minimum free space above	mm	6000	6000

Cooling Mode

System Sound Data in accordance with BS EN ISO 4871:2009

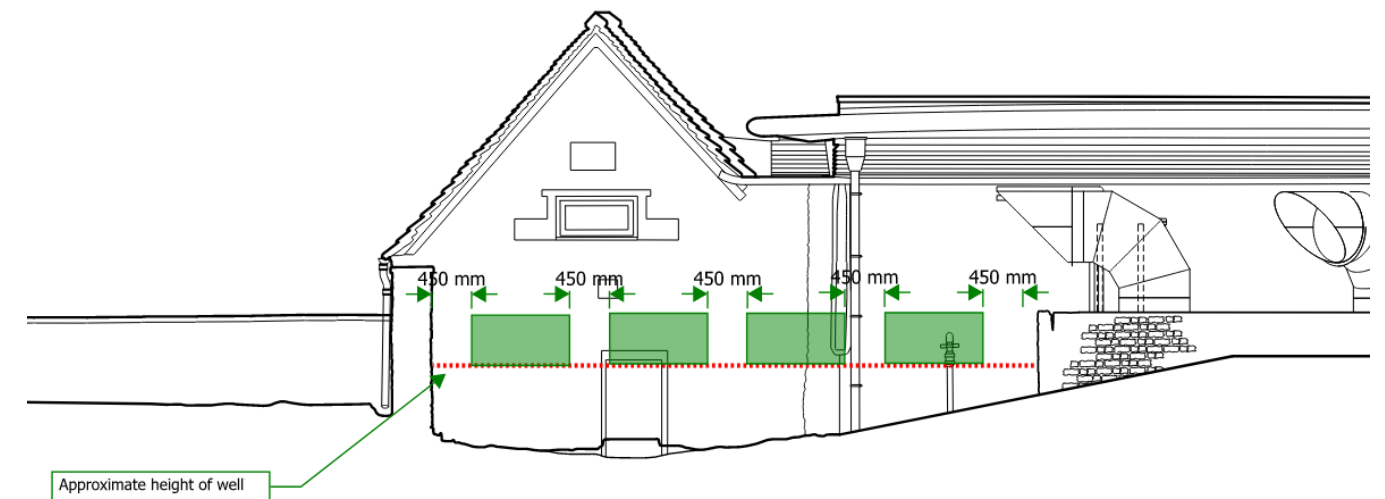
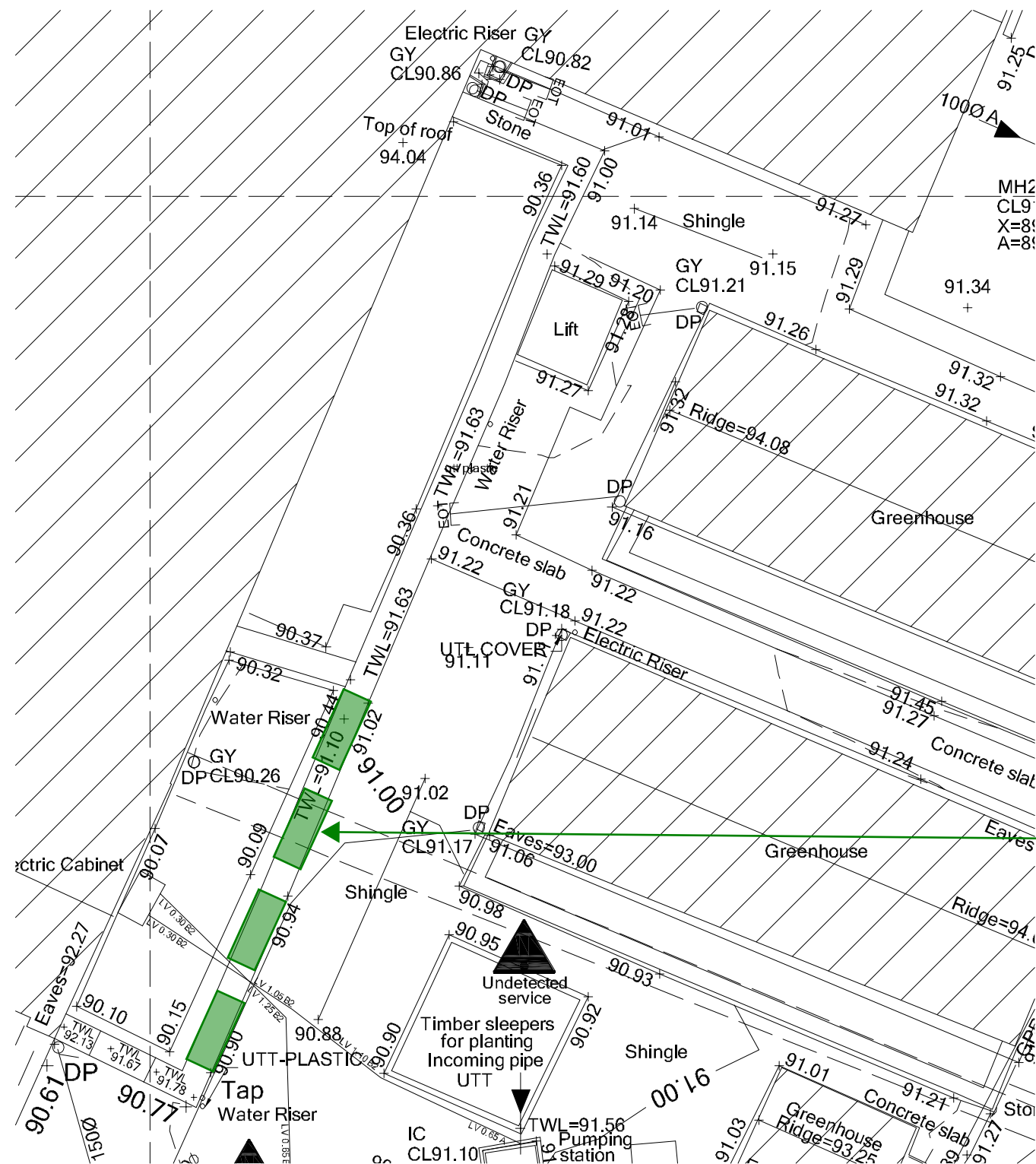
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Sound Power Level, Lw (Reference 1 x 10 ⁻¹² watts), dB (4)(5)(7)	79	80	66	63	59	52	50	44	85	67
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Sound pressure level at 10m, Lp(a) (reference 20 x 10 ⁻⁶ pascals), dBA (6)										35
-5°C Ambient Sound Data? ☐										
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Clade data for Cooling units operating at 50% fan speed (duty limited to 65kW each).

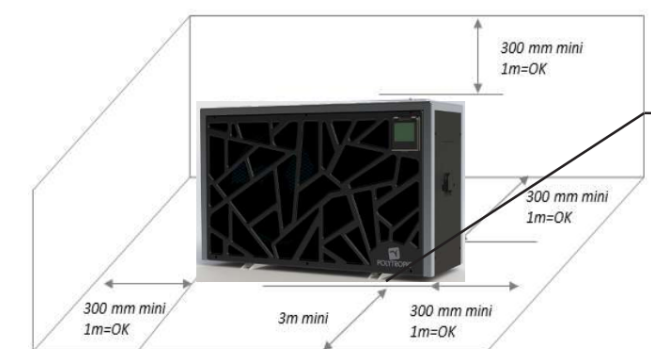
System 5 (Pool Water)



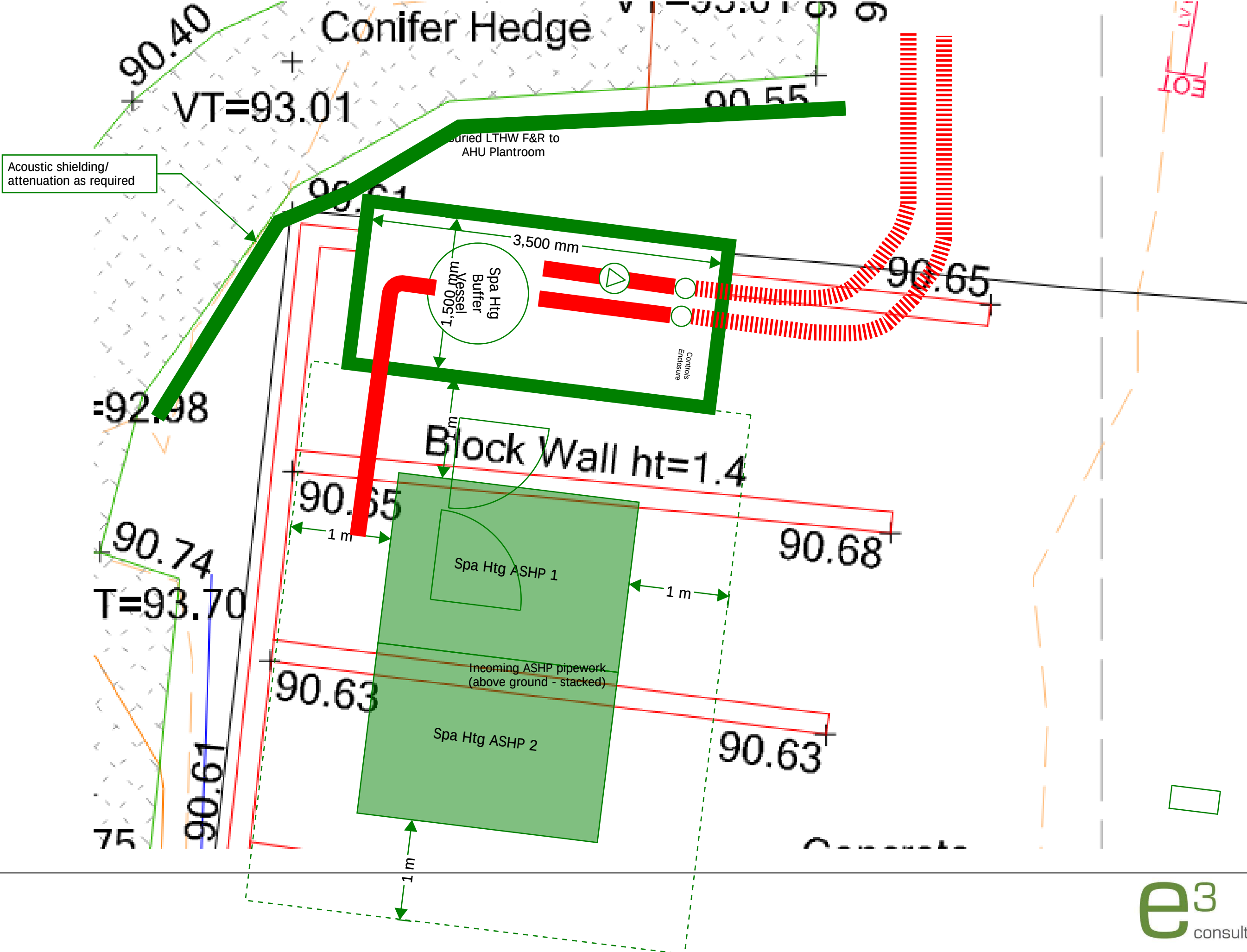
PROPOSED ELEVATION ON THE PLANT ROOM FROM POINT A
1:50

Noise level min-max (at 10m) CTTM certified acc. to EN ISO 3741 : 2010 ***	22 ~ 28 dB(a)	26 ~ 30 dB(a)	26 ~ 31 dB(a)	27 ~ 33 dB(a)	27 ~ 34 dB(a)	28 ~ 35 dB(a)	28 ~ 35 dB(a)
Noise level min-max (at 10m) acc. to EN ISO 3744 : 2010	21 ~ 25 dB(a)	23 ~ 26 dB(a)	23 ~ 28 dB(a)	25 ~ 30 dB(a)	25 ~ 30 dB(a)	26 ~ 31 dB(a)	26 ~ 32 dB(a)

4 no. units (1 no. standby) in row at low level



Airflow requirements



e³
consulting engineers