

GENERAL NOTES ON PILES:

- All foundation work to be in accordance with BS8004 (Foundations) and installed as I.C.E. Specification & Building Regulations.
- ALL LOADS ARE SAFE WORKING LOAD (SWL) IN KN. FACTOR OF SAFETY OF 1.5 WILL BE ADDED TO SWL.
- The specialist-piling contractor is responsible for the design of the piles to accommodate the working loads given. Copies of pile calculations are to be submitted to the Engineer for approval prior to the works commencing. The piling contractor shall notify the Engineer if ground conditions are found to vary from the site investigation report.
- Pile diameter will depend on types of piles used; Typically 100mm for Heli-Piles and 200-250mm for bored piles.
- The piles are to be constructed to allow sufficient length of reinforcement above cut-off level to enable anchorage into the ground beams. Concrete Piles shall extend 75mm into the ground beams. The pile heads are to be cast at least 150mm above proposed cut-off level with cut-offs being achieved by use of proprietary pile cut-off formers and debonding sleeves to reinforcement. The piling contractor is to be responsible for ensuring there is adequate anchorage of protecting reinforcement into the pilecap/ground beam.
- Piles to be installed within the following tolerances:- Maximum deviation from plan position 75mm; Maximum deviation from pile verticality 1 in 75.

- The piling contractor is to provide a detailed survey of all completed pile positions together with identification of all piles cast out of tolerance.
- If any pile is greater than 75mm from its intended position, Engineer to be notified and beam plan position adjusted to allow minimum of 25mm from edge of pile to face of beam.
- All concrete work to be in accordance with BS 8110. Concrete piles to meet class DS-1 standards for sulphate resistance. Details of concrete specification are to be submitted and approved by the engineer.
- All piles shall be subject to integrity testing.
- Prior to commencement of piling, Contractor to locate and identify all services in proximity to the proposed works.
- Working load tests to be carried out on 1% of piles, in accordance with the ICE procedure, if a factor of safety of 2.5 is used for design. A minimum factor of safety of 3.0, for pile design, is to be used where no pile tests are to be carried out.

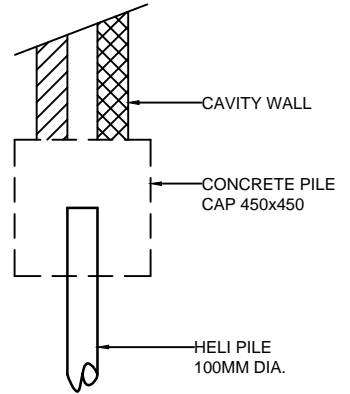
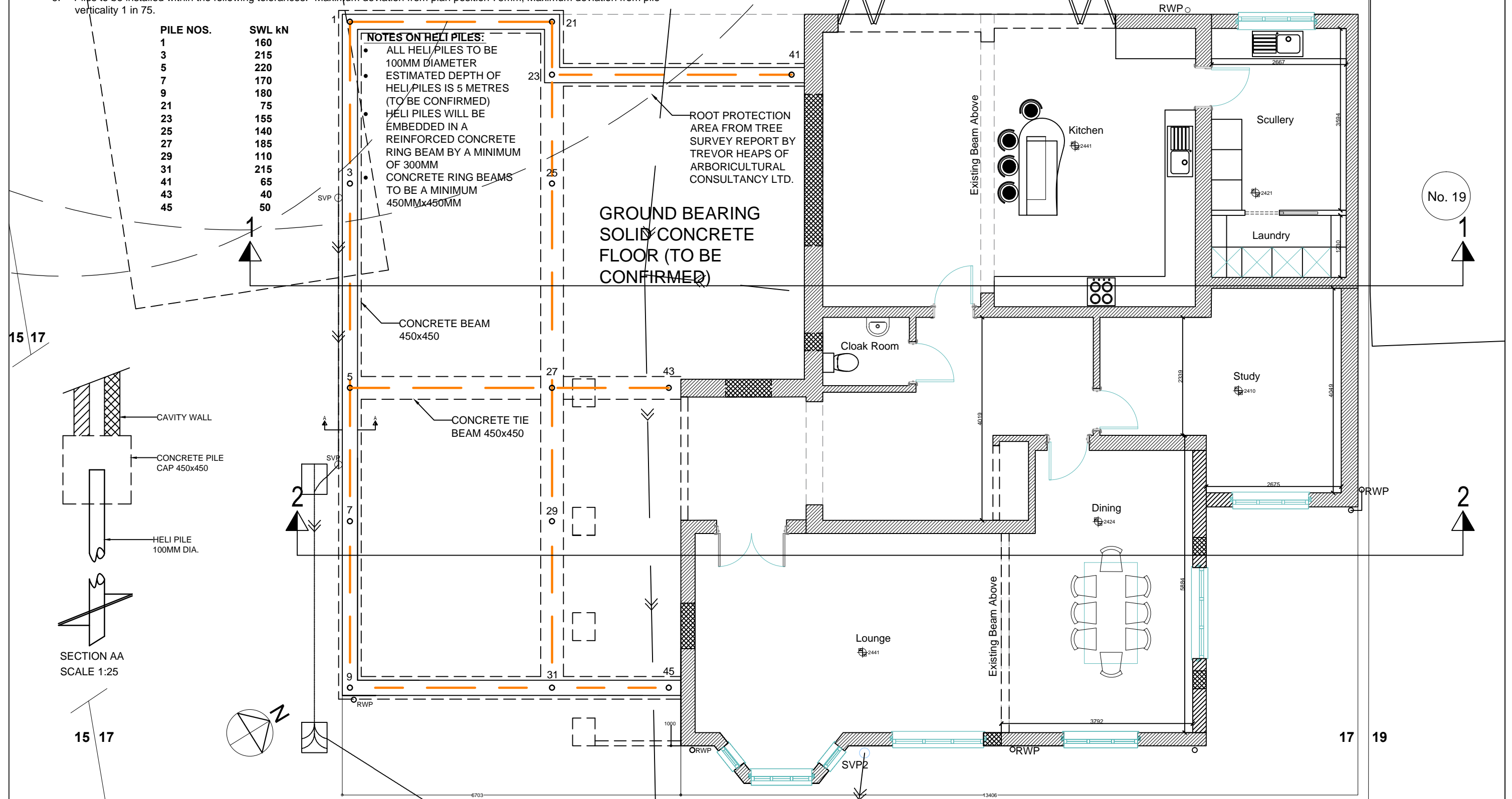
PILE NOS.	SWL KN
1	160
3	215
5	220
7	170
9	180
21	75
23	155
25	140
27	185
29	110
31	215
41	65
43	40
45	50

NOTES ON HELI PILES:

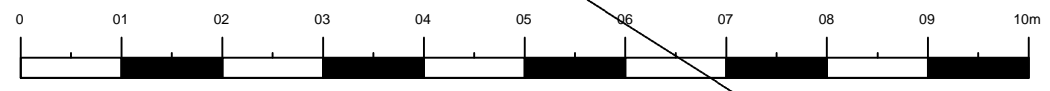
- ALL HELI PILES TO BE 100MM DIAMETER
- ESTIMATED DEPTH OF HELI PILES IS 5 METRES (TO BE CONFIRMED)
- HELI PILES WILL BE EMBEDDED IN A REINFORCED CONCRETE RING BEAM BY A MINIMUM OF 300MM
- CONCRETE RING BEAMS TO BE A MINIMUM 450MMx450MM

ROOT PROTECTION AREA FROM TREE SURVEY REPORT BY TREVOR HEAPS OF ARBORICULTURAL CONSULTANCY LTD.

GROUND BEARING SOLID CONCRETE FLOOR (TO BE CONFIRMED)



SECTION AA
SCALE 1:25



Proposed Foundation Plan

The Foundation for the extension will be on piles as part of the new building is within the Root Protection Zone (marked on this drawing), as recommended by the Arboricultural Impact Assessment & Method Statement (to BS:5837 2012) Report by Trevor Heaps.(Ref: TH 3364, Revision B, dated 17th May 2022)). The preliminary design as shown is based on Heli-Piles or mini concrete piles. It is recognized that the Heli piles may not have the required load capacity and more pile clusters may have to be used. The site is fairly flat with deep soil texture of clay-to-silt. The soil parent material is believed to be Prequaternary Marine / Estuarine Sand and Silt, based on information provided by the British Geological Survey (BGS). This needs to be confirmed on site. It is assumed that the piles and the ground beams will be designed and installed by a specialist sub-contractor.

All recommendations on Demolition, Excavation & Construction given in the Arboricultural Report will be strictly followed at all times.