

5 Kooloora Avenue, Freshwater

Foundation Inspections: Mid Floor Piers, Basement Retaining Wall, & Piers Parallel to Original Retained Wall

The site was inspected on the 27th May, 2024.

At the time of the inspection, the piers for the mid floor level of the proposed house were completed (Photo 1). The piers were taken to depths of between 2.3 to 2.9m below the current surface and had encountered Hard Clay. This material achieves a maximum allowable bearing capacity of 300kPa. As discussed with the Forman on site, as the clay gets soft when it is saturated, it is recommended a sump and pump system be installed to collect and remove the water. Once this is done, any soft clay over the footing surface is to be removed to expose the harder clay below.



Photo 1

The site was inspected again on the 29th May, 2024.

The foundation for the concrete footing supporting the retaining wall basement had been taken to Firm to Stiff clay (Photo 2). Water was pooling over the foundation surface at the time of the inspection. As discussed with the Forman on site, as the clay gets soft when it is saturated, it is recommended a sump and pump system be installed to collect and remove the water. Once this is done, any soft clay over the footing surface is to be removed to expose the harder clay below, that is a suitable foundation with a maximum allowable bearing pressure of 200kPa.



Photo 2

A line of 5 piers were put down beside the original Eastern house wall. These were taken to depths that extend beyond the adjacent basement cut by some 0.5m. The piers were embedded into Hard Clay with a maximum allowable bearing pressure of 300kPa.

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