FOUNDATION SYSTEM
TREE ROOT PROTECTION
METHOD STATEMENT
Introduction

Due to the proximity of trees to the location of the proposed development, it is proposed to use Tree Root Protection Measures (TRPM) during the installation of the foundations.

This document outlines the possible extent of works involved with the TRPM.

It is intended that this document is used in conjunction with the site specific Arboriculturist’s Method Statement.

On receipt of that document, its site specific requirements will be adopted and incorporated into this method statement.
Hand augering is undertaken at all pile positions within the Root Protection Area, if roots greater than 20mm diameter are found the pile is moved and the new position re-augered. Our in-house design department then re-analyse the slab design to ensure the new position is adequate.
The ground surface is protected with a breathable geotextile membrane. Over this cellweb is pegged out and the pockets filled with pea shingle to provide a permeable low bearing pressure working surface.
A typical piling rig used on a Tree Root Protection Service project. The rig is custom designed to have a very low bearing pressure, equivalent to a 12 stone man wearing size 10 shoes. The power pack (in back of photo) will be placed on ground protection mats.
Each pile position is sleeved using a polythene coated cardboard tube to prevent concrete from the pile leaching into the root zone.
The clear void is created using our proprietary collapsible void formers known as Deck Support Units. These are laid under the footprint of the building.
Perimeter jacks are laid around the edge of the footprint to allow fine level adjustments to be made.

The Deck Support Units are covered with marine ply to provide the formwork for the concrete slab.
The completed deck. Pile overlays made of a flexible material prevent concrete from the slab pour leaching onto the ground surface. Similarly the aluminium strips between the sheets of ply prevent concrete reaching the ground surface.
The slab prior to the concrete pour. The reinforcement steel, service ducts rising up through the slabs and the stainless steel edge detail can all be seen. The edge is levelled to a high tolerance by means of perimeter jacks.
Concrete is poured to a fine finish producing a slab with a very high tolerance. After 7 days of curing the Deck Support Units are removed.
This picture shows the finished voided system. The piles supporting the slab can be seen as well as the clear void the Housedeck system leaves. The pea shingle and cellweb under the slab are also visible and the geotextile membrane which prevents materials entering the void can be seen attached to the underside of the slab.