

Planning Appeal
Erection of Single Storey Dwellinghouse and Associated Works
Site On Eastern Boundary of No 2 Johnshill, East End, Lochwinnoch
Application No. 23/0179/PP
Supplementary Statement
22 March 2024

We have read the response from the Council's Tree & Woodland Officer and would comment further as follows:

The submitted structural engineering report details the various foundation options (with particular attention paid to the close proximity of tree roots) and recommends a system of Shire stabilisers or similar. These are small scale piles developed for the domestic market and do not require heavy specialist plant that could damage shallow roots.

It is noted that the officer states that the *"proposed piling system is a plausible solution for minimising physical root damage to trees onsite..."*

Attached herewith is information relating to a patented foundation system called Treesafe.

Treesafe is a foundation system that allows construction of residential or commercial structures close to, or within a Tree Root Protection Area (RPA). Treesafe is approved by Arboriculturists and prevents damage to tree roots in a number of ways. The attached brochure details the construction process.

The Treesafe foundation solution (and the Shire piling system) allow for air flow and water passage to the roots after the piling and foundation works are completed.

Attached is a case study of a Treesafe foundation solution in Illingworth, Windsor. The slab was suspended above ground level with a clear ventilated void. This approach allowed for air flow and water passage to the roots after the works were completed.

The specific foundation construction details will be submitted at Building Warrant/1st Stage approval.

We would suggest the following condition in the event that the Local Review Body decide to allow the appeal:

'That prior to the commencement of development, the applicant shall submit for the written approval of Renfrewshire Council as Planning Authority, a long-term Tree/Woodland Management & Maintenance Plan.

The Tree/Woodland Management & Maintenance Plan shall contain details on the monitoring of growth and condition of all retained trees within the application site boundaries, as well as all new trees planted.

Reason: To ensure that works are undertaken to a satisfactory standard in the interests of natural heritage.'

Improvements brought about by this development will contribute to an overall enhancement of the area whilst introducing the opportunity for long-term site management.



TREESAFE 

The tree friendly foundation solution



ABBAY PYNFORD



Treesafe is our patented foundation system that allows construction close to or within a tree Root Protection Area (RPA).

Benefits



Increased footprint - Treesafe creates the opportunity to increase the footprint of your site into RPA, allowing getting greater yield from your plot.



Cost certainty - By reducing the programme, prelims and eradicating the elements stated to the right, we can offer cost certainty for your project.



Faster - Treesafe is up to 70% faster than traditional methods and offers improved program certainty.



Safer - Treesafe has many features that enhance a safer environment on site, and comes with warranty provider approval: NHBC, Premier Guarantee and LABC.




Less environmental impact - Treesafe uses less concrete, requires less spoil removal, and significantly reduced vehicle and plant movement. Reducing the carbon footprint of your site.

Treesafe does not require the following elements:

- ▶ Piling mats (in 95% of projects)
- ▶ Excavations for ground beams
- ▶ Ground beam construction
- ▶ Pre-cast floor
- ▶ Sub-structure brickwork blinding within footprint
- ▶ Resources to manage the above





Treesafe is our patented foundation system that allows construction of residential or commercial structures close to, or within a tree Root Protection Area (RPA). Treesafe provides the opportunity to increase the yield of your site by allowing an increase in the footprint of your structure and/ or adding additional plots to your development.

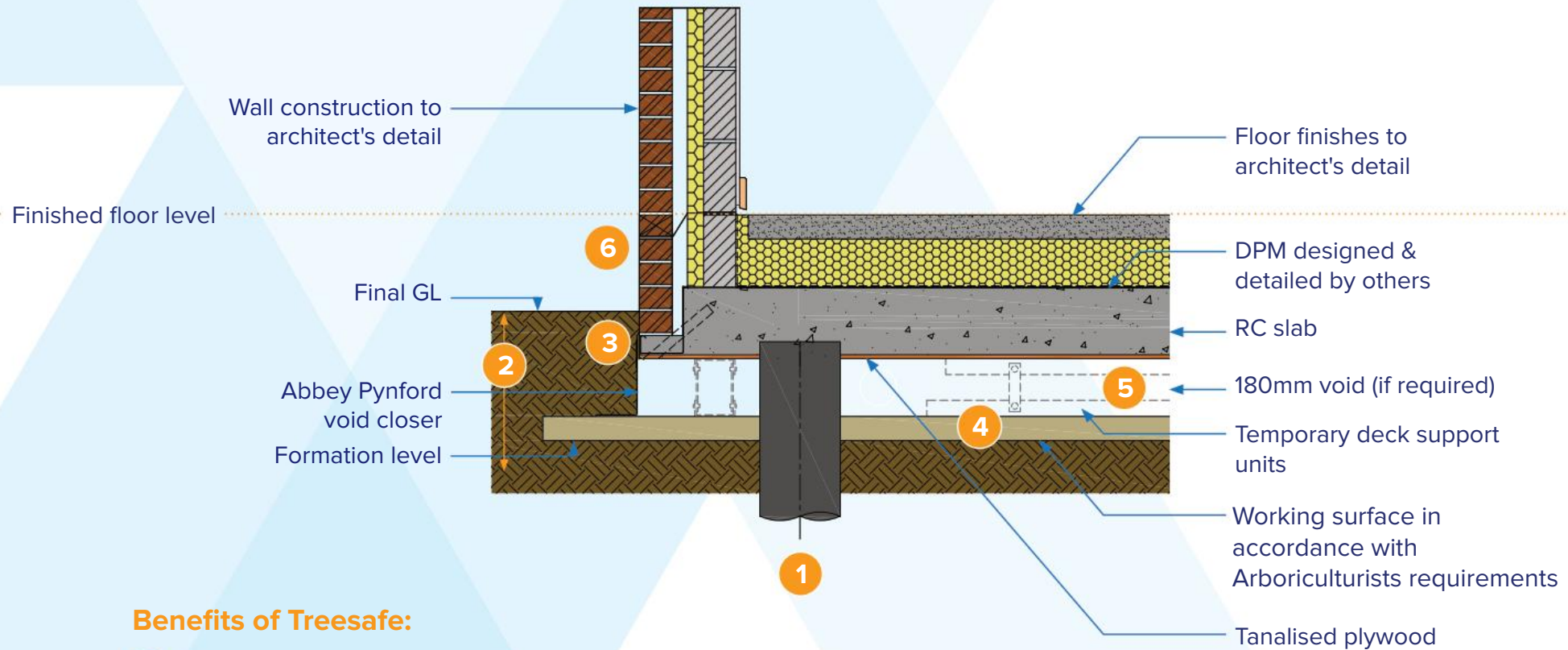
Treesafe is approved by Arboriculturists and prevents damage to tree roots in a number of ways. In preparation for piling we use air spades and hand augering techniques to identify any roots that may conflict with the proposed pile locations. If roots are present our in-house design team review and adjusted the design to accommodate them. We use a bespoke working surface to support our custom lightweight piling rigs, minimising excavation that could cause damage to tree roots. Each pile position is also sleeved, and further precautions are taken when pouring

the slab to prevent concrete leaching into the protected ground, that could cause harm to roots.

Treesafe can support a range of piling techniques, depending on ground conditions. We also offer alternative piling options, such as stone columns or reduced diameter piles.

Treesafe is a version of our Housedeck and Comdeck systems, both are BBA certified and warranty provider approved: NHBC, Premier Guarantee and LABC. All engineered solutions are fully underwritten.

Typical Treesafe detail_



Benefits of Treesafe:

- 1 Allows construction within Root Protection Areas.
- 2 Significant reduction in excavation.
- 3 Significant reduction in under build.
- 4 Bespoke working surface in place of piling mat.
- 5 Clear void to mitigate heave risk (if required).
- 6 No venting required.

Construction process_

Stages of typical slab build

Working within protected trees creates very site specific requirements. The Treesafe system is tailored to your site and specific arboricultural needs. The following covers some of our most common approaches, but not all.



Setting Out

We start by setting out the pile locations, as per the Abbey Pynford design. This takes place either directly on to the prepared ground or over a breathable geotextile membrane.



Bespoke Working Surface

Once setting out is complete a bespoke working surface is laid. We use three types of working surface: Cellweb (pictured), a concrete working surface (pictured) or granular mat. The surface type is dictated by the site requirements in conjunction with the Arboriculturist.



Hand augering

Hand augering is undertaken at all pile positions within the RPA. If roots greater than 10mm diameter are found, our in-house design team re-analyse the slab. A new pile position is proposed and re-augered. Once all positions are confirmed to be root free, piling can commence.



Piling

The piles are driven using our custom made light weight rigs, which can be supported by the bespoke working surface. This prevents the need for deep excavation for a piling mat, which would cause root damage. Each pile is then sleeved to prevent concrete leaching into the RPA.



Drainage & Services

After the piles are trimmed to cut off level the drainage and services are installed. This can be done by us or the client, project dependant.



Deck Support Units

Our patented temporary Deck Support Units (DSU) are laid out to create the void, upon which the raft will be built.



Edge Shuttering & Fix Reinforcement

Next, our patented edge system is installed on plywood, followed by the steel reinforcement to create the raft.



Concrete pour

Once final levelling is complete the concrete is poured, taking precautions to prevent concrete leaching into the RPA.



Finished structural slab

Once the slab is cured a membrane will be attached to prevent materials entering the void.

The finished slab is ready for trades on average 5-7 days after the concrete pour.

About us_

At Abbey Pynford we provide a more integrated approach to our services, offering a one stop shop to commercial contractors and private developers. Founded in 1988, Abbey Pynford Group has 30+ years of industry experience to support you through your project.

We offer a wide range of services ranging from our patented engineered foundation systems, various types of piling and underpinning.

We have our own in-house design team comprised of Structural and Geotechnical Engineers, providing underwritten design solutions across all our services.

We also have our own plant hire business providing specialist and bespoke equipment to the group and wider external market.

Our ethos is to provide a fully integrated service for our customers, providing support from conception through to construction. We always seek to provide the most cost-effective solution for your project, through innovation, product development, and a wealth of experience gained from 30+ years working in the industry.

Our services_

HOUSEDECK 

COMDECK 

TREESAFE 

FLOODSAFE 

PILING 

UNDERPINNING 



Health & Safety, Quality & Environmental Overview_



Certified H&S management system.



Certified H&S, Quality & environmental management system.



Home Builders Federation members.



ASUC founding members. Assured professional & technical competence.



Certified quality management system.



Certified quality management system.



Assured sustainability & H&S procedures. Certified quality audit beyond IOS 9001.



Backed quality assured SSIP scheme.



Certified H&S management system.



Backed quality assured SSIP scheme.



We send less waste to landfill by reducing dig and spoil removal with our foundation solutions.



We use less concrete with our foundation solutions than traditional techniques.



Through our reduced vehicle and plant movement we produce significantly less CO₂ emissions.



Treesafe offers a tree friendly way to build in Root Protection Areas. Approved by Arboriculturists.



We have 30+ years industry experience to support your project.



In-house design team and all designs and engineered solutions are fully underwritten.



Certified H&S, Quality & environmental management system and insurance.



Certified quality management system.



IMS Certified H&S, quality & environmental management systems.



Constructionline Gold members.



Certified quality management system.

Our commitment to you_

- ▶ You will receive the same **attention and quality of service** whether you are a small developer or corporate builder.
- ▶ We will provide you with a fully documented **proposal within two weeks** after receiving all required information.
- ▶ Our dedicated in-house design team, using the latest software finite element analysis, ensures that **each project is value engineered**.
- ▶ We will always **operate in the best practice**, complying with health, safety and environmental legislation.
- ▶ We promise to **serve in your best interests** and if we believe that one of our foundation systems is not the most appropriate scheme for your needs, we will advise you accordingly.

Our clients_

“ The Treesafe product is such a simple but effective method. From design through to completion Abbey Pynford offer a second to none service with excellent health and safety. ”

Colm O'Boyle, Surveyor, T&B Contractors



“ Abbey Pynford's system is the complete package offering a straightforward fully designed solution, saving us money and 6 weeks from our original programme. ”

Nick Jude, Construction Manager, Willmott Dixon



WILLMOTT DIXON

“ We have used Housedeck before and as usual this project ran very smoothly and was completed swiftly. Both the piling crew and the slab crew were excellent – nothing was too much trouble for them and the site was kept clean and tidy throughout. ”

*Tony Draper, Architect & Project Manager,
Carrington Fox*



carrington fox

“ Abbey Pynford worked fantastically well with us. Through solid communication and collaboration the construction has been a success. I would strongly recommend them for future projects. ”

*Sam Kemp, Project Manager,
Morgan Sindall Construction*





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ABBNEY PYNFORD



Illingworth_ Windsor

Value: £49,000

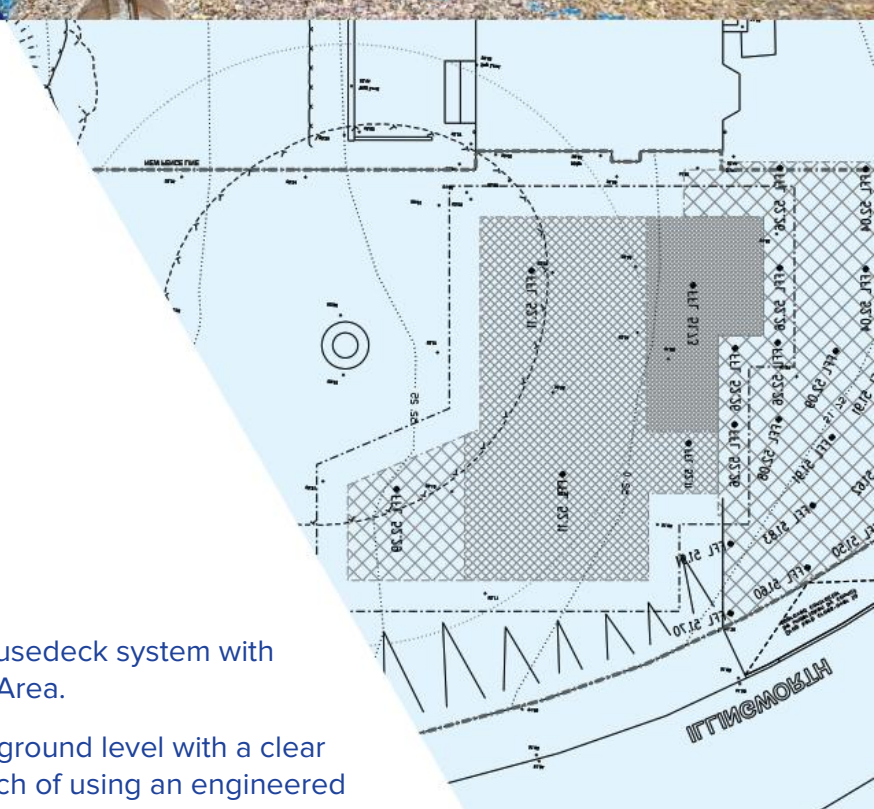
Size: 114m²

Duration: 6 weeks

Rig: Kitten mini-rig

Scope of work:

- ▶ Our brief was to design and install our Housedeck system with part of the site within a Tree Root Protection Area.
- ▶ The slab had to be suspended above the ground level with a clear ventilated void. Instead of our typical approach of using an engineered working surface, we used natural stones to form the working platform. This approach allowed for air flow and water passage to the roots after the works were completed.
- ▶ To ensure the tree roots were not damaged during the piling phase all piles were manually pre-augered and a number of piles were relocated to avoid clashes with existing roots.
- ▶ The site was also sloping, so some intricate profiling had to be introduced to the slab to suit the external ground levels, such as steps and downstands.



Get in touch to discuss your project requirements:

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