



Architects caring for Canberra's trees

Hear how retaining mature trees can benefit a building project.

Tree protection laws in the ACT have remained unchanged throughout most of Paul Tilse's architectural career of over 20 years.

Now, new tree protection laws will change the design and approval processes for Paul's architectural projects.

The [Urban Forest Act](#) will see more built environment professionals employing tree sensitive measures like those that Paul uses. This will enable more homes and neighbourhoods to be enhanced by the presence of trees.

The challenge

"I'm very passionate about working in with my clients' existing gardens and trees, creating living spaces that flow between indoors and out," says architect, Paul Tilse.

"Every site has its own conditions, such as the orientation, dimensions and topography of the block as well as things like utilities and easements. Trees are another one of those conditions that we consider from the outset of a design project.

"You get some mature trees that need a little bit of remedial work to get their form back together, but generally mature trees aid in the end product of the house for a range of reasons," Paul says.

Urban areas that are sparsely vegetated experience hotter temperatures during the day and at night. This is known as the "urban heat island effect". In summer, the night-time temperature can be around 8°C warmer in Canberra's built-up areas, particularly areas with fewer trees, than in surrounding rural areas.

As Canberra's population grows, more houses need to be built within the city's existing



footprint. Without the right rules in place, a more densely populated Canberra could end up with fewer trees. This would increase the urban heat island effect, putting vulnerable members of our community at a higher risk of heat related illness and making our community less resilient to the impacts of climate change.

The action

New laws have been developed to protect the trees that protect us. Architects, like Paul, are essential to the success of our new tree protection measures.

"In terms of aesthetics, a house always looks more anchored into the landscape if there are mature trees around it, rather than just a blank site," says Paul.

"Trees provide so many benefits to the occupants of the house. When there are existing trees on a block, we look at the trees' locations, size and appearance to determine how we want to use them in our design."

"The closer you want to build to a tree, the more you need to consider for instance the slab and footing details. By employing tree sensitive measures, we can usually still create enough floor area at ground level while also keeping the trees.

"Once we've figured out how to retain trees on the site, we also need to think about how they will interact with the building once it's there. We avoid box gutters when we can, especially where there are deciduous trees, and we use things like gutter-guard to reduce the amount of leaves that get caught. We also provide for more overflows in sections that are likely to collect more leaves," Paul says.



Examples of tree-sensitive measures in construction include:

- pier and beam construction
- suspended slabs
- cantilevered building sections
- screw piles
- contiguous piling
- cell matting

The benefit

“We find that projects are always more successful when there’s a mature tree. It enhances the look of a house and the views from within, as well as enhancing functionality and enjoyment for the occupants,” says Paul.

“Mature trees help with the performance of the house. In summer, trees provide great shading. In Canberra’s climate, trees to the western side of the house can be particularly beneficial. Mature trees dramatically reduce the need for air conditioning.”

“Trees also create inviting outdoor spaces. They provide shade without the need for an artificial shade structure or

roof. With deciduous trees, that shade is only there when you need it – in the hotter months of the year.

“I think generally people like more trees. It’s really just a matter of how you work with them to create a successful project.”

Help protect trees, so they can protect us

From 1 January 2024, the [Urban Forest Act](#) will be in place to ensure our city’s trees are protected as Canberra continues to grow.

This new legislation will more than double the number of protected trees on private land, and provides increased protection for both private and public trees. You cannot do work to or around a protected tree that may cause damage to it and must get approval for work such as tree removal and pruning, utility maintenance or installation and building or landscape construction.

Trees approved for removal must be replaced or, where new planting is not possible, a financial contribution must be made to plant more trees.

Protected trees

A tree on private land is protected if it:

- is 8m or taller
- has a canopy 8m or wider
- has a trunk circumference of 1m or more at 1.4m above natural ground level
- is a registered tree – that is, the tree has been identified as being of exceptional value and is listed in the ACT Tree Register
- is a dead native tree on leased land that at 1.4m above natural ground level has a trunk circumference of at least 1.88m
- was planted in the last five years as part of a Canopy Contribution Agreement.

8m or taller

Has a 1m trunk circumference or more at 1.4m above natural ground level

