

A guide to land repair near trees

This guide will assist property owners who are undertaking land repair work near trees and vegetation (including lawns and planted areas).

Trees are complex living organisms and are susceptible to damage from a wide range of construction and land repair works.

Trees do not heal if they are damaged, and the damage will stay with them for the rest of their lives. What may seem as minor damage at the time can become a serious long term problem through the onset and spread of decay.

Damage can be caused to all parts of the tree including the trunk, branches, foliage and roots — so property owners need to take care when working around trees.

Protected trees

Before you get started on your land repair work you will need to confirm whether the trees on your property are protected. Some trees are protected by the Christchurch City Council City Plan or by a notice on the certificate of title for your property.

You can find out whether a tree on your property is protected by contacting the Christchurch City Council's Customer Call Centre (contact details below).

We recommend that you contact an appropriately qualified arborist prior to commencing land repair work near protected trees on your property. It is likely that you will need an arborist/tree specialist to supervise any land repair work within 10 metres of the trunk of a tree protected by the City Plan or if a protected tree requires pruning. See contact details for arborists/tree specialists below.

Tree damage

When undertaking land repair, you need to take steps to avoid damaging trees and vegetation on your property.

The most common area to be damaged during land repair work is the roots. While damage to the trunk, branches and foliage is easily spotted, damage to roots goes largely undetected and can take several years to become apparent. The main cause of death of trees is because of root damage.

Very few trees have a tap root. Most trees' root systems are in the top 600 millimetres of the soil. Given ideal ground conditions, the roots will radiate out past the edge of the canopy of the tree (this is called the dripline). See figure one below. The older a tree is, the more likely that the roots will extend past the dripline.

Figure one: Tree root system



It is extremely easy to damage a tree. The main causes of damage are:

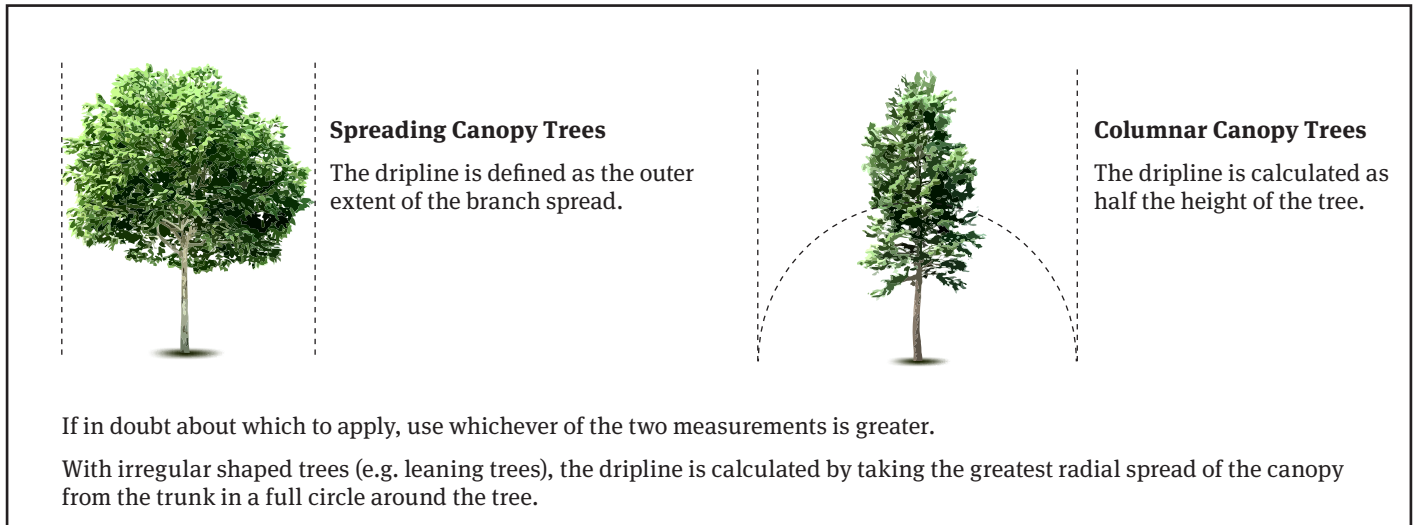
- Root severance through activities such as excavation
- Bark damage caused by vehicles
- Soil compaction through parking or driving vehicles over the roots or storing heavy equipment on the roots
- Changing the level of soil by excavation or filling
- Poisoning of roots, e.g. by washing down equipment or diesel spillage.

Land repair work near trees

It is important that protected trees, or trees that the property owner wishes to retain, are fully protected against damage that can be caused during construction and land repair work.

The easiest way to protect trees during land repair works is to fence off the area around the tree, positioning the protective fencing at the dripline of the tree. Trees come in many shapes, including spreading canopy and columnar canopy trees – so refer to figure two below to confirm the dripline of the tree(s) on your property.

Figure two: Dripline for columnar and spreading canopy trees



The protective fence should be at least 1.8 metres in height and extend 360° around the tree or vegetation area. To further assist in the protection of the tree, it is recommended that the fence is difficult to move and obstructs the placement of items on the roots.

Any works that are required to be undertaken within the dripline of the tree should be discussed with an appropriately qualified arborist to confirm that the land repair work to be undertaken is either not going to cause damage or the likelihood of damage can be mitigated in an appropriate manner.

Excavation or filling greater than 200 millimetres at the dripline should also be assessed by an appropriately qualified arborist as these may also have a negative effect on tree health.

Pruning of trees

Property owners need to consider the potential to damage the canopy of a tree during land repair works. Prior to work commencing the tree should be assessed to see if there is any pruning that should be undertaken to minimise the likelihood of damage. Any pruning required should not cause the tree to deteriorate in health or structural strength. An appropriately qualified arborist should be engaged to determine if the pruning can be undertaken without having a detrimental effect on the tree.

If you are unsure as to whether or not the intended work will cause damage to the tree, then we recommend that you contact an appropriately qualified arborist (see contact details below) for more information, prior to the work commencing.

Resource consent for land repair near protected trees

If you are carrying out land repair work within 10 metres of the trunk of a tree protected by the City Plan you will need to apply for a resource consent. The consent will contain conditions about how the work must be carried out to prevent damage to the tree.

For more information about resource consents for land repair visit www.ccc.govt.nz/landrepair or call the Christchurch City Council's Call Centre on 941 8999.

Arborists / tree specialists

Contact details of Christchurch arborists / tree specialists are:

Treetech Specialist Treecare Ltd	0800 873 378
Arbor Vitae Ltd	0272 292 536
Advanced Tree Services Ltd	0272 202 724
City Care Ltd	9417 200

Christchurch City Council

Civic Offices, 53 Hereford Street, Christchurch 8011
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Telephone 941 8999. Facsimilie: 03 941 8267
Or visit our website: www.ccc.govt.nz