

Tree Protection and Management Plan

Proposed development - Pathways Property Group
4-18 Northwood Road and 274-274A Longueville Road, Lane Cove NSW
September 2020.

Tree Protection and Management Plan

The following tree protection measures are recommended to minimise adverse construction impacts on the tree nominated for preservation on the subject sites as noted on the Landscape Master Plan LP03 prepared by Svalbe & Co. The Tree Management Plan shall apply during demolition, site establishment, civil works, fencing, building construction, drainage works and landscape phases of the site redevelopment.

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General. A qualified and experienced Arborist shall be engaged to direct all tree and site works within the Tree Protection Zone of trees to be preserved. Hand excavation must occur in sensitive areas. Damage to trees may occur but this can be kept to a minimum if regular inspections and reporting is maintained between Arborist and Head Contractor during demolition works, site establishment, civil and construction works.

No root greater than 30mm. in diameter shall be cut unless authorised by an Arborist. Roots must be cut with a sharp handsaw or long handled pruners.

Tree protection Zones

A Tree protection Zone (TPZ) (The TPZ is expressed as a radius $12 \times$ the trunk diameter measured at chest height) shall be established around trees nominated for preservation in accordance with **AS4970-2009 The protection of trees on development sites -**

The following activities shall be avoided within the TPZ.

Excavation, trenching and civil works,
Ripping and cultivation of soil,
Mechanical removal of soil,
Soil disturbance or movement of natural rock, apart from rock that is removed in approved excavation.
Soil level changes including the placement of fill material,
Movement and storage of plant, equipment and vehicles,
Erection of site sheds,
Affixing of signs, ropes or hoardings to any tree,
Storage of building materials, waste and waste receptacles,
Disposal of waste materials and chemicals including paint, cement, solvents, grout/slurry, fuel, oil and other toxic liquids,
Other physical damage to the trunk or root system,
Filling, reduction of existing levels or compaction within the TPZ of the tree unless approved by an Arborist, and
Any other site activity that is likely to cause damage to the tree.

Protective fencing.

Protective fencing must be erected around each tree nominated for preservation before site clearing and establishment and before any materials are brought on site and prior to the commencement of civil and construction works. The protective fencing shall remain in place for the duration of the works and must not be removed or altered without approval on an arborist. AS 4687 specifies applicable fencing requirements.

Protective fencing shall comprise 1800mm.high chain link wire mesh fixed to 50 mm. galvanised steel posts. Portable chain link fencing may be installed. Colored plastic tape fencing or plain strained fencing wire fixed to steel droppers is unacceptable. Chain link portable panels must be securely fixed top and bottom to avoid separation. No storage of building materials, tools, paint, fuel or contaminants and the

like shall be placed within the fenced area. Ropes, ties or signs must not be attached to any part of a tree (s) to be preserved.

Trunk Protection. Where space does not permit the erection of protective fencing install trunk protection. Trunk protection shall comprise the placement of 1.8m or less lengths of 75 mm x 40 mm hardwood or pine spaced at 125 mm centers around the trunk secured in place by metal strap bindings or 10-gauge fencing wire fixed at 300 mm centres. Prior to placing battens install a soft protective padding to ends of timbers to prevent damage to bark and conducting tissue. Trunk protection must remain in place for the duration of all site work.



Typical trunk protection timbers



Image showing metal binding to secure trunk protection timbers

Warning Signs. Advise contractors and visitors to the site of the purpose for protecting and preserving the tree (s) by the placement of suitable warning signs fixed to all tree protection fences and trunk protection throughout the site. Contact telephone numbers shall be clearly shown on all warning signs.

Ground Protection.

For trees installed with Trunk Protection timbers an area not less than a 2.5 m radius shall have the entire ground surface mulched to a depth of 100 mm with composted Eucalyptus leaf and woodchip or similar cushioning mulch to reduce compaction of the surround soil and to help retain soil moisture and reduce erosion.

Crown protection.

Tree crowns may be injured by machinery such as excavators, drilling rigs, cranes, trucks, hoarding installation and scaffolding. The tree protection zone may need to include additional protection of the above ground parts of the tree. .

Crown protection may include pruning, tying-back of branches or other measures. If pruning is required, requirements are specified in AS 4373 and should be undertaken before the establishment of the TPZ.

Tree removal and pruning.

Trees for removal should be marked onsite as per the approved tree protection plan. Before removal, the project arborist should confirm that all marked trees correspond with those shown on the schedule or plan. Other tree work may be specified in the tree protection plan.

Tree removal should be carried out prior to erection of protection fencing. Contractors should be instructed to avoid damage to trees within protection areas when removing or pruning trees. This may include restrictions of vehicle movements.

Any approved pruning required to allow for works should be done at this stage by an Arborist with min AQF Level 4 qualifications.in accordance with AS 4373 the pruning of amenity trees.

Stumps to be removed from within a TPZ must be removed in a manner that avoids damaging or disturbing roots of trees to be retained.

The project arborist should supervise tree removal and pruning and certify the works on completion.

Encroachments.

Minor encroachments within Structural Root Zones are acceptable.

The preferred method of examination and or excavation within the SRZ is the application of non-invasive vacuum or hydro excavation.

This practice is now widely adopted in sensitive situations that require root investigation.

Tree sensitive construction measures such as pier and beam, suspended slabs, cantilevered building sections, screw piles and contiguous piling may be adopted to minimize the impact of encroachment.



Stuart Pittendrigh M. Arb. Australia (#2003)
Consultant Arborist