

# Street Tree POLICY



South  
Waikato  
District  
Council

# POLICY



## Street Tree Policy

Record number:	DocSet ID number – 428841	
Version number:	11	
Approval/RES Date/Number:	24 February 2022	RES 22/32
Responsibility:	Parks and Reserves Manager	
Historic revision dates:	7 December 2017– <i>first adopted</i> ,	
Next review date:	26 August 2024	
Review frequency:	3 yearly if required as part of the Long Term Plan; up to 5 years	
Approval authority:	Council	

### Policy Objectives

Streetscapes align with Council's "Healthy, proud and connected community" strategy by contributing towards Council's outcome of "A community that has a feeling of pride" and in achieving the outcome that "The district has a positive image to others outside of the district". Well managed streetscapes also align with the Council's strategy of providing "Durable infrastructure" by ensuring the selection of "Infrastructure and services that are fit for purpose and are affordable now and into the future".

### Background

#### The benefits of street trees

Street trees provide many benefits, including aesthetic, environmental, climatological, ecological, economic and social factors. Street trees can be used in our urban landscapes to provide positive outcomes for both the community and visitors to our district.

Street trees have the ability to reinforce the local identity and character of a place, provide visual unity, and soften the often harsh and sometimes visually chaotic built character of our urban environments. As such, trees are an important tool in the urban design.

Planting trees in street berms provide visual interest, (particularly in autumn when deciduous species are at their most colourful, and when flowering in spring), shade, and also provide habitat for our important indigenous insects and bird life.

Street trees improve the environment by absorbing, filtering and purifying the basic elements of air and water as well as softening the harshness of the urban environment.

The air, water and nutrient exchange processes undertaken by trees are fundamental to human existence and the continuity of the food web which supports all life on earth. Their continuous metabolic processes ameliorate the adverse effects of sun, wind, rain, dust and pollution.

#### The challenges of street trees

Council acknowledges that trees in urban locations can create problems of a physical nature, which may include interference with underground and overhead services, disruption to structural foundations, difficulty of access, leaf fall blocking drains and stormwater channels, slippery surfaces, traffic safety issues related to reduced visibility, excessive shading and obstruction of views.

Additionally, trees can cause problems more of a social nature, such as safety issues associated with the visibility of streetlights and disputes over leaf litter, shading and views. In such circumstances, it is necessary to manage the streetscape with appropriate and effective protocols to lessen and mitigate these issues to provide positive outcomes for all.

## Policy Statement

This Policy outlines the protocols and procedures to be used to provide that effective management of our District's street tree assets.

This Policy provides protocols for the following headings:

- 1) Streetscape Design
- 2) Street Tree Selection
- 3) Street Tree Positioning
- 4) Street Tree Planting
- 5) Street Tree Maintenance
- 6) Street Tree Removal
- 7) Public Engagement
- 8) Engagement within Council teams

### 1) Streetscape Design

- Wherever street trees exist, or are proposed, the potential conflict with utilities and roading assets will be assessed prior to any decision to retain, maintain or remove trees.
- Driver sight distances need to relate to traffic function and vehicle speeds, and as such streetscape planting should not be placed in the visibility splay. The achievement of relevant Austroads criterion for setback of vegetation is desirable. (**Refer to Appendix 1** for setback distances)
- Traffic Calming

From a traffic-calming perspective, streetscaping helps to reduce vehicular speed by reducing the perceived openness of streets, signals where an area is not intended to be traversed or moved through and indicate where traffic-calming initiatives have been implemented.

When streetscape planting is used in this context, trees are intended to visually block, reduce or impair motorist's line of sight, either along the carriageway berms or within the carriageway. The mature height of the street trees will therefore be according to the traffic engineering specifications instead of normal carriageway landscape specifications.

Other considerations will include:

- a. Ensuring there will be sufficient drainage (and water reticulation) for new landscaped traffic calming devices to be installed in existing carriageways
  - b. Ensuring that existing infrastructure (such as underground piping, cabling, aqua cells and so forth) will not be compromised by the plant roots
  - c. Maintenance requirements (including the establishment of traffic management plans)
  - d. Landscape replacement costs should a traffic calming device be traversed by a motorist
  - e. Proximity to other services such as lighting columns and utilities
  - f. Signage, bus stop and pedestrian crossing (formal and informal) visibility
  - g. Crime prevention through environmental design (CPTED) principles, especially passive surveillance
  - h. Using the appropriate plant species for the traffic engineering, ecological, sense of place and amenity requirements
- Tree Pits

Carriageway tree pits require additional design consideration such as frangibility, tree root intrusion into base material, the possibility of the tree drowning in a confined root space – or obtaining insufficient water. Optimum species will be chosen with a ball root system or those which have a deep rooting habit with minimum surface roots.

## 2) Street Tree Selection

- Selection of tree species that grow well in our District's climate and soil conditions.
- Predominantly deciduous exotic tree species that provide shade in summer, visual interest in autumn and light in winter will be used. New Zealand Native trees may be used in road reserves or berms where the natural form allows for removal of lower branches to provide adequate visibility for pedestrians and drivers. **Refer to Appendix 2** for examples of trees that have been approved in conjunction with Council's roading team.
- Selection of tree species for berm size. Trees will be selected according to berm width to support the size of tree at maturity. Berms less than 500mm will not be selected for tree planting. For narrower berms smaller type trees at maturity will be selected.
- Selection of tree species for natural shape. To alleviate issues with spread over private properties, roads, shading, visibility and access trees for planting in street berms will be selected that have an upright, pyramidal, columnar or vase shaped natural growth pattern unless the road reserve is wide enough to accommodate trees that have rounded, spreading, weeping or umbrella shaped growth patterns.
- Bush type larger shrubs such as Camellia species will not be used due to pedestrian and driver visibility concerns.
- For uniformity residential streets will be planted with one type of tree species per street.
- Larger berms on road reserves and main thoroughfares (such as Maraetai Road and Balmoral Drive in Tokoroa) may be planted with a range of tree species with appropriate consideration of natural growth form.

## 3) Street Tree Positioning

- All street trees are to be centrally located within road berms.
- Street trees are to be planted at an equivalent rate of no more than one tree per residential property although groups of trees may be approved where the kerb line and location of services allow for local features.
- All street trees are to be centrally planted within a berm at a minimum of:
  - a) 3.0m from any driveway
  - b) 8.0m from any streetlight
  - c) 6.0m from any intersection
  - d) 5.0m from any bus stop or school speed sign
  - e) 1.5m from underground services (ideally)
  - f) Or any other location that causes a safety concern. **Refer to Appendix 3** for Street Tree Clearances.
- Where there is no existing roading infrastructure within a road reserve and with consideration of natural tree form the distance between trees to be planted from existing or other newly planted trees in road reserves will be a minimum of six metres to a maximum of fifteen metres to allow for maximum growth potential and ease of turf maintenance operations.
- Only street trees that reach a maximum height of 3 metres at maturity shall be planted in berms where power lines are situated overhead.
- No street tree shall be planted in any berm where existing trees located in the property opposite the berm would adversely affect the development or natural growth habit of a street tree.

## 4) Street Tree Planting

- Street tree planting will take place from May to September as part of the Parks and Reserves department's annual tree planting programme.

- Parks and Reserve staff will maintain a database of street tree replacements required and in conjunction with Council's roading team determine any unplanted streets to be planted each year.
- Council will use the Before -U-Dig website to organise for any utility service cables or features to be marked on site prior to tree planting operations commencing.
- All street trees, where able to be sourced, shall be of a minimum grade of PB 95 (45L) grade to provide instant effect and to withstand any minor vandalism.
- Trees shall be well branched, symmetrical and of typical habit for the species. All plants shall be nursery stock of good form, healthy and vigorous with strong fibrous root systems and free of all pests and diseases.
- All trees shall be supplied with the central leader intact, whereby no pruning of the central leader shall have taken place.
- All tree stock shall be well rooted but not root bound. All root balls and containers shall be free of weeds.
- Planting of street trees will be undertaken by an approved contractor under the Waikato LASS Approved Contractor Scheme. This work shall include:
  - a) All torn or damaged branches and roots being pruned before planting
  - b) Removal of low branches on the stems
  - c) Planting holes shall be both wide enough and deep enough to accommodate the entire root system, with room for roots to spread. The planting hole diameter should be 30-60cm wider than the root system:
    - i. The sides of the planting hole shall not be left smooth or glazed as this may inhibit root development. Pan soil at the base of the planting hole shall be broken up to improve drainage. Backfill soil shall be added to the bottom and consolidated but not compacted so the root ball will not settle.
    - ii. Planting holes for container grown trees shall be no deeper than the root ball. If the planting hole is initially dug too deep soil must be added to the bottom and firmed so the root ball will not settle.
    - iii. All debris, weeds and grass shall be removed from the planting site. Turf removed to create the planting hole shall not be backfilled into the planting hole.
    - iv. All nursery identification tags shall be removed from the tree.
  - d) Slow -release fertiliser tablets shall be installed at the time of planting.
  - e) Trees shall be staked with two rough sawn Pine H4 treated or hardwood stakes with at least one third of their length (600mm) in the ground and at least 1.0m exposed minimum:
    - i. Two flexible biodegradable ties per stake shall be attached. Ties shall be tensioned to avoid chafing of the tree against the stakes but with enough play for the tree to move in the wind.
    - ii. All ties shall be fixed to the stakes and shall be positioned no more than one third of the height of the tree on the stake.
    - iii. All staking shall be parallel with the road kerb for street trees.
    - iv. Stakes shall be inserted to avoid hitting the root ball.
    - v. Some nursery-supplied trees are provided with a stake attached, usually directly against the main stem. This stake is to be removed and replaced according to this specification.
  - f) Trees shall be mulched with woodchip to a minimum of 300mm diameter and to 100mm depth.
    - i. No mulch shall cover any stem graft.
- Council reserves the right to remove any tree planted within a street berm by any person(s) that has not been authorised by Council.
- Any street tree that is vandalised will be added to the tree planting programme list to be replaced the next winter.
- Street trees will not be replaced if vandalism has occurred more than two times in that calendar year in that particular street.

**5) Street Tree Maintenance**

- To ensure street trees remain fit for purpose both visually and in overall condition so as not to pose a risk to people or property Parks and Reserves staff shall monitor the street trees within the District and maintain a database of street tree maintenance works required, and with the Parks and Reserves Manager's approval implement a programme of street tree maintenance for each year.
- Maintenance works required for street trees will be determined by Council's Parks and Reserves staff through conducting tree inspections, engaging arborists to undertake assessments and providing reports, identifying any maintenance works needed in the normal course of their duties and through investigating street tree related Service Requests from members of the public.
- Minor street tree maintenance work shall be carried out by the Council's Open Space Maintenance Contractor (who must be an approved contractor under one of the health and safety pre-qualification schemes accepted by Council) and shall include:

- a) Control of epicormic growth
- b) Removal of broken minor branches
- c) Replacement of broken stakes and removal of stakes no longer required
- d) Removal of loose branches from around street trees
- e) Formative pruning of juvenile trees

The following works will be carried out by an arboricultural contractor who shall be an Approved Contractor under one of the health and safety pre-qualification schemes accepted by Council (Which may include the current Open Space Maintenance Contractor) as arranged by the Parks and Reserves Manager or Parks and Reserves Officers:

- a) Crown lifting
  - i. Crown lifting is the removal of the lowest branches. The actual clearance height achieved will vary with individual trees, depending upon their age, size, form and habit, and with consideration of issues identified via Service Requests received from residents or members of the public at large. The natural shape of the tree should be preserved as much as possible.
  - ii. For young trees, to minimise stress on trunks and to develop or maintain good trunk taper, at least one-half of the foliage distribution should be retained on branches that arise in the lower two-thirds of the trunk.
  - iii. Crown lifting of young trees should not exceed more than one third of the total height of the tree, unless otherwise specified by Parks and Reserves staff.
  - iv. For semi-mature and mature trees crown lifting and lateral branch reductions shall be carried out to retain natural crown shapes. In many cases these clearances shall be 2.5m to 3.0m (minimum range) above footpaths and 5.0m (minimum range) above carriageways. This should be achieved by the removal of only those parts of the branch which extend below the desired clear height. Entire branches may require removal as directed by Parks and Reserves staff.
- b) Crown reduction
  - i. Reduction pruning is usually carried out in conjunction with power line clearance pruning and is not a recommended practice for normal tree maintenance, unless otherwise specified by Parks and reserves staff.
  - ii. Care shall be taken to avoid producing a 'topped' or 'lopped tree' appearance. The natural shape of the tree shall be preserved as much as possible, unless otherwise specified by Parks and reserves staff.

c) Crown thinning

- i. Crown thinning is cleaning out with the additional removal of secondary healthy and sound branches to produce an even density of foliage and a well-spaced and balanced branch structure.
- ii. Crown thinning may be carried out to lessen wind resistance, to reduce the weight of limbs, to increase light penetration and air movement through the crown and to assist in lessening the amount of excessive leaf fall, seed capsules or fruit. The percentage area of thinning is variable, depending upon the age, size, form and growth habit of the tree.
- iii. The branch volume and leaf area removed shall not exceed 20% unless otherwise specified by the Parks and Reserves staff.

d) Foliage clearing

- i. Trees located nearby streetlights shall have any foliage that is obstructing full inflorescence pruned back accordingly.

e) Line clearing

- ii. Trees located beneath overhead services (such as power lines and telephone wires) shall be pruned such that the minimum clearance between the tree and the overhead service is maintained at all times. The minimum clearance distances for trees beneath overhead services given in the table below shall apply:

Description	Minimum clearance	Optimum clearance
Aerial Bundled Cable	150 mm	150 mm
Telephone Wires	150 mm	500 mm
230 -400 Volt Power Lines	500 mm	1.0 m
11,000 Volt Power Lines	1.5 m	2.0 m

f) Dead wooding

- i. Dead wooding consists of the removal of dead, diseased, dying, defective, suppressed and conflicting branches.
- ii. Dead wooding shall include the removal of foreign objects and plant matter deemed to be detrimental to the tree, when this can be done without inflicting undue damage to the tree and as specified by the Parks and reserves staff.
- iii. The extent of dead wooding and the diameter size of dead wood to be removed shall be determined on a site-by-site basis, as specified by the Parks and reserves staff.

g) Remedial pruning

- i. Remedial pruning involves the removal of hazardous, damaged, diseased or poorly pruned branches back to undamaged or healthy tissue to ensure public safety and to improve the overall appearance of the tree.
  - ii. Hazardous branches shall be removed as soon as possible to ensure public safety.
- All pruning shall be done to achieve Natural Target Pruning, which is the removal of a branch, stem or stub in such a way that a final cut is made as close as possible to the branch collar without cutting into the branch collar or leaving a protruding stub. The aim is to prevent damage to the remaining branch or trunk tissue.

Consideration shall always be given to the species, health, age, condition and location of the tree, as well as the reason for pruning the tree. Care shall be taken to avoid excessive pruning.

Pruning should allow for the natural distribution of foliage and weight along branches and branch ends according to tree species and stages of maturity.

- Protection of existing street trees

- a) Root protection zone

The minimum area required to ensure that a tree's health and stability is safeguarded, will be calculated using the following table:

Root Protection Distances

Tree age Vigour / Metres

- i. Young trees (where the age of the tree is less than 20% of life expectancy):  
Good vigour 6 x DBH\*  
Poor vigour 9 x DBH
- ii. Mature trees (where the age of the tree is between 20% and 80% of life expectancy):  
Good vigour 9 x DBH  
Poor vigour 12 x DBH
- iii. Over mature trees (where the age of tree is greater than 80% of life expectancy):  
Good vigour 12 x DBH  
Poor vigour 15 x DBH

\* DBH means Diameter at Breast Height which in NZ is diameter at 1.4m high (the diameter of the stem 1.4m above ground level).

- b) Below Ground Works

- If installation is required under existing trees and vegetation, then trenchless technology should be considered. If this is not practicable, advice from a qualified arborist is required to minimise damage to the vegetation.
- No works are to commence within 30m of historic/protected or notable trees without written approval from Council's Parks staff. Council may require that an arborist monitor works in or around these trees.

- c) Assessment Prior to Works

- Prior to undertaking any work within the drip line of retained vegetation an on-site assessment of the work proposed shall be undertaken by an arborist appointed by the Parks and Reserves Manager and those areas where supervision by the arborist is necessary.
- Where heavy machinery would be operated, driven or sited within the drip line of any retained tree temporary protective fences shall be erected between the tree and the work area so as to protect the tree from damage. The position and composition of the protective fences shall be established prior to works commencing, and once erected, approved by the arborist prior to the commencement of any site construction works. The temporary protective fences shall be strong and appropriate to the degree of construction works taking place on the site. The protective fences shall be a solid barrier which cannot easily be picked up and moved. The protective fence shall be at least 1.5m high.
- No works, storage of materials, cement/concrete washings and leaching of chemicals, trenching or alteration of soil grade shall occur within those areas demarcated by a temporary protective fence. The



temporary protective fences shall remain in place throughout the duration of the construction works. The position of the protective fence shall not be altered without the prior consent of the arborist.

d) During Works

- Within the root zone of retained trees:
  - a) The removal of any existing footpath, kerb and channels, when within the root zone of retained trees shall be carefully undertaken so as to cause no more than minor damage to the retained trees.
  - b) All roots of greater than 35mm in diameter shall be carefully worked around and protected. No such roots shall be removed, except:
    - i. where no practicable alternative to removing the root exists and;
    - ii. where this would have a no more than minor detrimental effect on the tree and this is the supported professional opinion of the Arborist.
  - c) Any such removal shall be undertaken by the Arborist.
  - d) Exposed roots of greater than 50mm shall be covered with 50mm of sand and root zone areas shall be immediately covered with a suitable permeable Geotextile fabric immediately after removal of existing concrete.
  - e) Prior to laying of base course, the underlying roots shall be protected by laying a suitable permeable Geotextile fabric over the soil surface.
  - f) There shall be no positioning (sitting or driving through) of heavy machinery unless this is on an existing hard surface (concrete or paved) or temporary hard surface.
  - g) The temporary hard surface shall be constructed by laying Geotech matting on the surface, 100mm weed free mulch or similar soft material on a hard surface placed on the soft material, such as a sheet of ply board.
  - h) All roots that are severed shall be pruned cleanly back to the surface of the excavation using sharp handsaw or secateurs. All exposed or severed roots shall be kept damp (using hessian cloth or similar) until the excavated area is backfilled.
  - i) No damage shall be done to the trunk and above ground parts of any tree that is to be retained.
  - j) Any pruning required to facilitate the works to retained trees shall be undertaken by an arborist.

**6) Street tree removal**

- Ratio of trees being felled and planting of trees in streets:

Parks and reserves management will be careful to maintain a balance between removing trees that are causing issues and planting new street trees that continue to enhance our street environs, and to do so district wide.
- Assessments for the removal of street trees will be completed by Parks and reserves staff. Expert advice from a qualified arborist may be sought to aid in an assessment.
- The following issues will be considered for determining the removal of street trees:
  - a) Poor tree health due to age
  - b) Poor tree health due to disease, injury, pest damage

- c) Safety concerns:
    - i. Tree structure (such as weakened branch unions on multi-leader trees)
    - ii. Pedestrian and driver visibility concerns
  - d) Significant infrastructural damage to footpaths, kerbing, or road
  - e) Significant shading issues
  - f) Root damage, disease
  - g) Significant damage to berm (such as raised roots affecting normal mowing operations)
  - h) Where deemed necessary to complete Council initiated or approved projects.
  - i) Vandalism has damaged the tree beyond repair
  - j) Significant leaf, seed capsule or fruit fall into private property
- Removal of street trees will require the approval of the Parks and Reserves Manager.
  - In any circumstance whereby removal of any street tree(s) for Council initiated or approved projects is not approved by the Parks and Reserves Manager or is found to be objectionable to affected members of the public the following procedures can be taken:
    - a) Site visit by the Parks and Reserves Manager and the Project Manager, and where applicable, affected members of the public to discuss, consider alternative options and come to a decision.
    - b) If no decision can be agreed to the matter will be referred to the Asset Group Manager to hear all points of view and provide a final decision regarding the tree asset(s).
  - Street trees will be removed by an arboricultural contractor who shall be an approved contractor under one of the health and safety pre-qualification schemes accepted by Council Once tree felling operations are completed unless arranged otherwise by Parks and reserves staff the wood from trees that have been felled will be cut to suitable lengths and left on the berm for local residents to remove for firewood. This will be on a first -come- first -served basis.
  - Stumps will be ground, with grinding extending to a minimum depth of 75mm below ground level. This depth will be deeper where needed to accommodate a replacement tree being planted. All excess grinding material shall be removed, and the hole reinstated by filling with good quality topsoil, compacted, levelled and sown with ryegrass. On completion the area shall be reinstated to achieve a level surface consistent with the existing topography.

## 7) Public engagement

- Where trees are proposed to be planted in street berms a letter is to be delivered to those residents whose berm has been identified as being viable for planting. The letter will give information on the tree being considered and provide an opt out option by asking residents to contact the Council within two weeks if they prefer not to have a tree planted on the berm in front of their property.

This data will then be recorded on a spreadsheet for future reference. This ensures Council is not paying for any trees that will subsequently be deliberately vandalised by residents not wanting any trees planted outside their property.
- Service Requests regarding street trees are to be attended to within Council set deadlines with due consideration to the issues being raised by the resident. It must be noted that traditionally trees can be an emotive issue, and Parks and reserves staff must act accordingly in dealing with these as they arise.

If a resident requests that a street tree be removed a Parks and Reserves Officer will assess, and if the request is denied shall explain how the request has failed to meet the criteria used to determine the removal of street trees. Other options such as crown thinning will be considered to achieve a positive outcome for the resident where possible.

- Council shall not be liable for any unauthorised tree(s) planted within street berms between the road or footpath and the private property's boundary by residents. This shall include any tree maintenance or removal costs and any repairs required to berms caused directly by the tree(s), which shall be the responsibility of the landowner of the private property involved.

#### **8 Engagement within Council teams**

- All Council teams involved with matters relating to street trees will effect a policy of collaboration between teams to provide for best practice in street tree management.

This will include the Infrastructure and Maintenance team in relation to roading, footpaths or water services issues, the Communications team in relation to providing information to the public and the Parks and Reserves team in relation to street tree maintenance and removals, pedestrian and traffic visibility issues, and streetscape planning. Council teams will implement regular and clear communication with a "no surprises" policy, with agreed delineation of responsibilities to be attributed to each team.

Each team will implement their responsibilities in a manner that does not adversely affect the performance of other teams in meeting their agreed targets and deadlines.





## **Relevant Delegations**





## **References and Relevant Legislation**



### **Annotations**

<u>Res No</u>	<u>Date</u>	<u>Subject/Description</u>
17/243	05/10/2017	Received by Council, amended
17/301	07/12/2017	Adopted

12  
Appendix 1

STREET TREES			
BOTANICAL NAME	DESCRIPTION	COMMENTS	PICTURE
Acer x freemanii cultivars	A medium size deciduous tree with fantastic autumn colour. Round shaped Medium size		
Acer negundo 'Kelly Gold', Box Elder	Umbrella to round shaped tree with fresh yellow- lime green foliage turning yellow in autumn. Deciduous Small size tree	Needs shelter	
Acer negundo violaceum, Box Elder	Long reddish pink flower tassels delight in spring. Young shoots are purple and new foliage is bronzy. Fast growing, medium size tree quite tolerant of extremes. Tree habit is round/oval and irregular Deciduous medium size tree		
Acer palmatum & cultivars, Japanese Maple	A large variety of deciduous trees with fantastic autumn colour and a great variety of habit and shape from weeping, upright to round. Small tree	Needs shelter	





<p>Acer platanoides, Norway Maple</p>	<p>A fast growing, broadly columnar tree. Has broad five-lobed leaves, which are bright green turning golden yellows in autumn. Widely used in street planting. Excellent shade tree. Hardy, tolerates dry conditions. Deciduous</p>		
<p>Acer rubrum cultivars</p>	<p>A medium size deciduous tree with fantastic fall colour. Round shape Medium size</p>		
<p>Acer saccharum, Sugar Maple</p>	<p>Large deciduous tree with spectacular autumn leaves in cold regions of red, orange and yellow shades. Compact crown with upswept branches.</p>	<p>Requires a minimum of 7m wide berm Neighbouring properties would be considered due to shade</p>	
<p>Acer saccharinum, Silver Maple</p>	<p>Light green lobed leaves with silvery underneath. Leaves look lovely when ruffled by the wind. Orange, scarlet and yellow autumn leaves. Open vase shaped, rapid growing large tree.</p>	<p>Requires a minimum of 7m wide berm Neighbouring properties would be considered due to shade</p>	





<p>Aesculus carnea, Red Horse Chestnut</p>	<p>Medium sized deciduous tree with round to pyramidal shape with rich pink candle-like flowers in spring. Suitable for avenue plantings, parks and large gardens</p>		
<p>Alectryon excelsus, Titoki</p>	<p>A medium evergreen native tree. That requires shelter from winds. Round to umbrella shape</p>	<p>Needs shelter. NZ native</p>	
<p>Amelanchier Canadensis, Shad Bush</p>	<p>Hardy attractive shrub or small tree. White starry flowers cover the tree early spring with fresh coppery growth providing good contrast. Small purple berries follow which can be useful for culinary purposes and are also attractive to birds. Great autumn display with yellow, orange, crimson to purple colour. Very hardy, tolerates dry exposed conditions, deciduous</p>		
<p>Betula spp &amp; cultivars, Birch</p>	<p>An interesting selective of small to medium deciduous trees. Having distinctive bark from bright white to peeling chestnut colours with a range of habits.</p>		
<p>Carpinus betula, Common Hornbeam</p>	<p>A hardy tree very amenable to being clipped into a tight hedge or</p>	<p>Requires a minimum of 7m wide berm Neighbouring properties would be considered due to shade</p>	

	<p>pleached avenue. New spring foliage a vibrant fresh green. Turns to gold and copper tones in autumn. Retains some copper foliage through winter. Similar in appearance to the English beech. Very hardy, deciduous, medium to large tree.</p>		
<p><i>Carpinus betula</i> 'Fastigata;</p>	<p>A medium sized tree with a narrowly columnar habit, perfect for avenue planting. Leaves turn yellow/gold in autumn. Hardy. Deciduous.</p>		
<p><i>Cercis canadensis</i> &amp; cultivars</p>	<p>Very pretty small deciduous trees. Flowering in spring with either white, pink or mauve flowers followed by green or burgundy heart shaped leaves. Good autumn colour</p>		
<p><i>Cornus</i> spp, Dogwood</p>	<p>Small deciduous flowering trees with vibrant autumn colours</p>		
<p><i>Cornus kousa</i>, Japanese Dogwood</p>	<p>Spectacular autumn colour and white flowers in late spring. A small to medium deciduous tree, vase-shaped when young, then becoming more oval.</p>		




<p>Crataegus cultivars, Hawthorn</p>	<p>Small deciduous tree with beautiful display of flowers in spring</p>		
<p>Fagus sylvatica cultivars, Beech</p>	<p>Small deciduous tree with bright golden-yellow or burgundy young foliage, becoming green/ burgundy in summer, yellow and brown in autumn. Upright narrow shape</p>	<p>Incredibly slow growing</p>	
<p>Fraxinus griffithii</p>	<p>A evergreen round medium tree</p>		
<p>Ginkgo biloba cultivars, Maidenhair tree</p>	<p>Pretty small deciduous trees with lime to yellow soft foliage</p>	<p>Male plant only</p>	

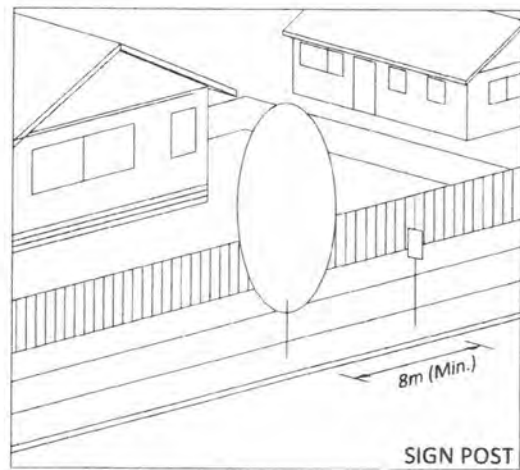
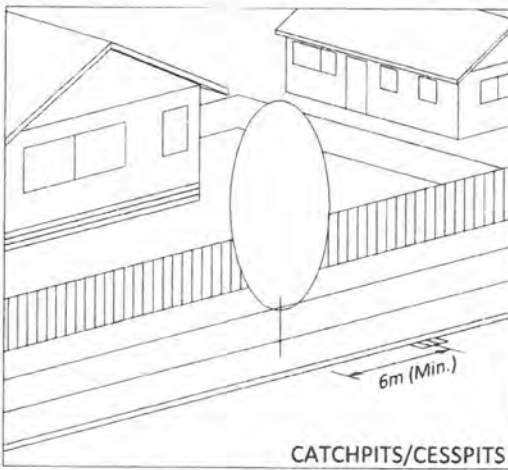
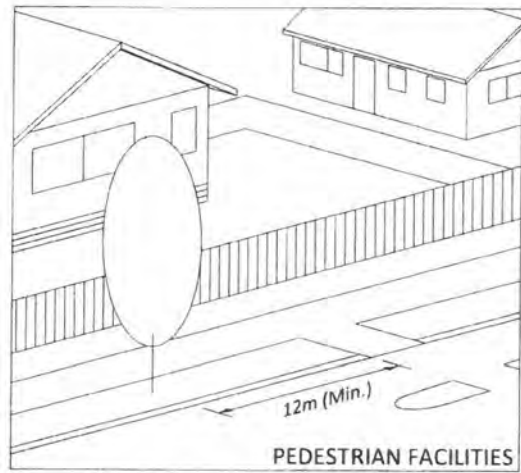
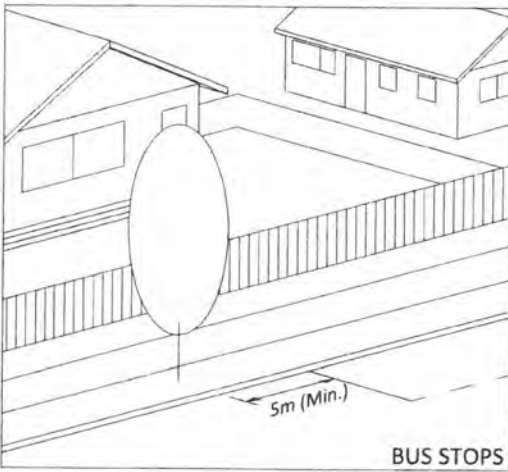
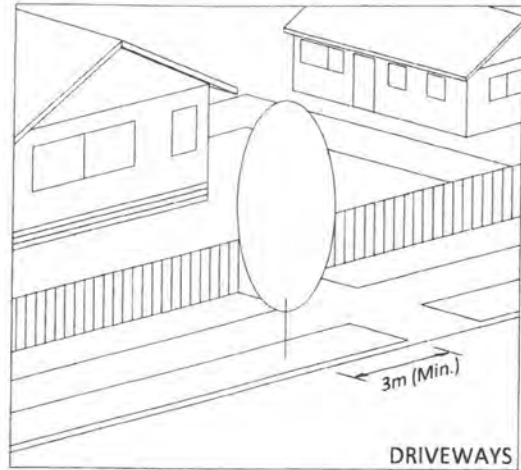
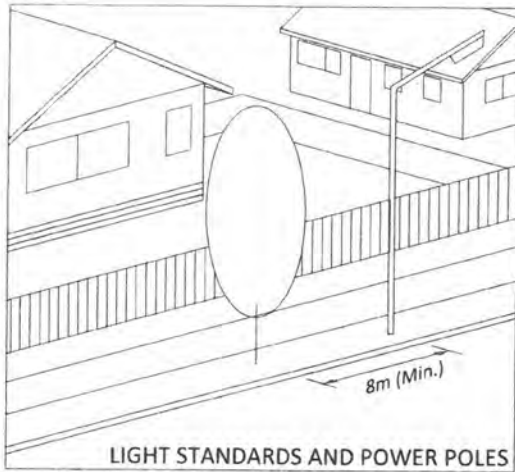


<p>Hoheria spp</p>	<p>NZ Native trees with starry white flowers in summer</p>	<p>Suitable for pruning for visibility</p>	
<p>Lagerstroemia indica, Crepe Myrtle</p>	<p>Beautiful small slow growing tree, with a variety of flower colour from pinks, mauves and white. Has striking bark as it matures with stunning autumn colour. Round shape</p>	<p>Slow growing</p>	
<p>Liriodendron tulipifera 'Fastigiatum'</p>	<p>Medium upright deciduous trees with fresh lime green foliage in spring darkening in summer with vivid yellow based autumn colours. In spring has lime- yellow tulip shaped flowers</p>		
<p>Lophostemon confertus, Queensland Box</p>	<p>Evergreen tree with interesting bark. Oval shape</p>	<p>Minimum of 3m berm</p>	

<p>Malus floribunda cultivars, Crabapple</p>	<p>A range of small to medium growing deciduous trees with mainly a round shape. Pretty spring flowering and autumn colour.</p>	<p>Choosing cultivars that are not heavy fruiterers or in large berms where fruit would only fall on turf that is maintained by council</p>	
<p>Parrotia persica, Persian Ironwood</p>	<p>A stunning medium growing deciduous tree that has lush green leaves with fantastic autumn colours. Round shape</p>		
<p>Pistacia chinensis, Chinese Pistachio</p>	<p>Stunning deciduous tree with mid green leaves with fantastic autumn colour. Round shape</p>		
<p>Pittosporum spp</p>	<p>NZ Natives. Quick growing and hardy</p>	<p>Suitable for pruning for visibility and use in larger berms</p>	

19  
Street Tree Policy

<p>Sophora spp, Kowhai</p>	<p>Medium semi-evergreen tree with stunning yellow flowers. Round shape</p>	<p>NZ native</p>	
<p>Sorbus spp.</p>	<p>Small to medium-sized compact pyramidal to round trees with silver/green leaves. Has medium-sized berries of various colour in late summer, leaves changing to gold and russet early autumn. Regarded as a tough tree for windy or coastal conditions. A good all-round hardy street tree. Hardy, deciduous</p>		
<p>Taxus baccata 'Fastigata', English Yew</p>	<p>Small growing conical shaped tree to useful in groups and creating different silhouettes and textures. Upright narrow Shape</p>	<p>Used in larger berms planted away from the road side</p>	



No trees within visibility splays unless specified.  
 Trees to be limbed to 2.5m from ground level.