



# Vegetation in the Road Corridor Guidelines

Asset Management and Systems

**FINAL DRAFT**

# 1. Guideline Definitions

**Arborist** refers to an appropriately qualified arboricultural advisor appointed to advise on the planting, management or removal of trees on Council land including the road corridor.

**AC** – Auckland Council

**ATCOP** refers to the Auckland Transport Code of Practice.

**Auckland Council Parks (AC Parks)** means the relevant Area Manager of AC Parks.

**Auckland Transport Road Corridor Maintenance (AT RCM)** means the relevant Area Manager of AT RCM.

**Auckland Transport (AT)** refers to Auckland transport, a CCO of Auckland Council, who is responsible for managing the road corridor.

**Biodiversity** refers to the "totality of genes, species, and ecosystems of a region". In the context of these guidelines, it refers to the preference for selecting a variety of native vegetative species to ensure species diversity and species richness.

**Tree Management Plan (TMP)** is a management plan prepared by the Network Utility Operators Group (NUOG) and Auckland Transport for works on or adjacent to street trees, that are classed as a Permitted Activity status within the (Proposed Auckland Unitary Plan)

**Noxious & Environmentally Damaging Plants** - Those plants that the Regional Pest Management Strategy has identified as noxious or recognised as being a threat to our parks, native bush, reserves, and the general environment. For noxious plants there is a legal requirement to eradicate them from the district.

**Herbicide** - An agent used to destroy or inhibit plant growth.

**Regional Pest Management Strategy 2007-2012 (RPMS)** – A strategy prepared by the legacy Auckland Regional Council in accordance with the Biosecurity Act (1993) to address the management and control/eradication of pests in the Auckland Region.

**Road Corridor** has the same meaning as **road** in the Local Government Act 1974 (Section 315). In short, it covers the total area of land between road boundaries including:

- carriageway (formed road)
- footpath including kerb and channelling
- cycle ways, cycle paths
- land that is legally designated as road but is not currently formed as carriageway or footpath (legal road or unformed road)
- walkways between streets
- unformed roads

**Street trees** are trees located within the road corridor, on the grass verge or berm, or occasionally within the paved part of public roads, shared or civic spaces.

**Terminology** is used in this document to describe whether an aspect or statement is a requirement under law/mandatory or good practice:

- *Must* – indicates something that is mandatory or required by law
- *Should* – indicates a recommendation
- *May* – indicates something that is optional and may be considered for use.

**Trees** are any woody vegetation, including that below ground, that has the potential to reach a girth or aggregate girth of not more than 5 stems, of or exceeding 95mm at breast height (1.4m).

**Urban Area/Environment** is defined under the Resource Management Amendment Act 2013 as:

“....an urban environment allotment having an area of 4,000 m<sup>2</sup> or less-

- (a) that is connected to a reticulated water supply system and a reticulated sewerage system; and
- (b) on which is a building used for industrial or commercial purposes, or a dwelling house; and
- (c) is not a reserve or subject to a conservation management plan or strategy under the Conservation Act 1987 or Reserves Act 1977.”

**The Waitakere Ranges Heritage Area Act (2008)** (WRHA Act) recognises the Waitakere ranges, foothills and coastal environment as a heritage area of national significance. All works within the Heritage Area require consideration of the purpose and objectives of the Act and Local Area Plans developed under the Act for the communities within the Heritage Area.

**Weed or Pest Plant** – An organism that is capable of causing at some time a serious adverse and unintended effect on people and/or the natural environment. (Biosecurity Act, 1993), **OR** in accordance with the AC Weed Management Policy (2013) a weed is “any plant growing where it is not wanted *and* which has an adverse effect as defined within the policy”.

## 2. Guideline Summary

The Mayor’s vision outlines turning Auckland into the world’s most liveable city by 2040. The Auckland Plan has identified that an efficient and integrated network of roads and public transport is vital to delivering this vision. As a Council Controlled Organisation (CCO), AT is responsible for delivering the region’s transport services – from roads and footpaths to cycling, parking and public transport. Through the Statement of Intent and to contribute to the achievement of priority areas and targets contained in the Auckland Plan, AT is required to prioritise and optimise investment across transport modes and related infrastructure.

AT has developed a set of guidelines to ensure that the transport services will be delivered on a consistent basis around the Auckland region. These guidelines identify the approach AT will apply when managing the transport assets. The approach identified in the guidelines is cognizant with the Level of Service identified in the Integrated Transport Programme and Asset Management Plan.

Trees and other forms of vegetation contribute to the regions identity, form and well-being along with providing essential ecosystem services in terms of air and water quality, a sense of place and well-being, as well as forming a local identity. The urban forest is the underpinning element for the regions biodiversity and AT is keen to ensure that as much as possible of the vegetation in the road corridor contributes to a significant native biodiversity resource for the region and requires careful management and stewardship.

These guidelines address the provision and maintenance of trees and other forms of vegetation within the road corridor with the intention of ensuring the primary function of the corridor for the movement of people and provision of utility services is not compromised. The selection of plant species and their location relative to street lights, power poles and drainage services is considered and addressed in greater detail in the ATCOP. AT supports and encourages native biodiversity in the region and supports the establishment of green corridors along the road network.

AT is responsible for the provision and maintenance of the berms/verges in the road corridor, as well as all vegetation along rural roads. This includes flail mowing and vegetation over hanging footpaths and roads which is growing from private property. AC Parks have responsibility for the maintenance of street trees and gardens in the road corridor in urban areas.

## 3. Background

AT is responsible for vegetation control in the road corridor of rural roads and for the maintenance of grass verges/berms in urban areas in the Auckland region. It is estimated that there is more than 7,000 km of legal road around the region, including the Gulf Islands, much of which includes trees and other forms of vegetation located within the boundaries of the legal road. AC Parks have responsibility for the maintenance of urban street trees and gardens as well as wetlands in the road corridor.

AT and AC have worked closely with the Auckland Utility Operators Group to develop a Management Approach for Works on Street Trees by Network Utility Operators. The TMP identifies the requirements to work on and nearby trees in the road corridor by NUOs in an appropriate manner which is consistent with the provisions of the Proposed Auckland Unitary Plan. The TMP details when and how works on trees in the road corridor may be undertaken, when trees may be removed and when an arborist must be involved. The details in this Vegetation Guideline complement the documented TMP and all enquiries regarding works on trees in the road corridor should be directed to the AT RCM or the Asset Manager in the first instance.

These guidelines outline the approach to selecting appropriate species of vegetation, the establishment and maintenance of those plants/trees and the control of existing vegetation located in the road corridor. Technical details and specifications are provided in the relevant chapters of the ATCOP.

AC's Weed Management Policy addresses the use of agrichemicals in the road corridor and parks/sports fields. The removal of pest plants is undertaken by the AC Biosecurity team.

The Guidelines on Vegetation in the Road Corridor was developed jointly between AT and AC Parks.

## 4. Purpose and Scope

The main purpose of the road corridor is to enable the movement of people, provision of access to private property, and the provision of utilities. The road corridor also has an important role in the "amenity or streetscape" value of the area. This guideline supports the need to manage trees within the road corridor to protect their ecological and amenity values while acknowledging the need to balance tree protection with the safe & efficient management, maintenance and upgrading of infrastructure and utilities in a coordinated manner.

The objectives of planting vegetation in the road corridor include:

- To maintain and enhance the visual amenity, character and natural features of the city and to provide a sense of scale to complement the built form,
- To protect and enhance ecosystem functions and services -, assisting with the filtration of air and stormwater pollutants, water conservation, providing visual amenity values, supporting the region's biodiversity and the urban forest, providing habitat for bird/wildlife and moderating temperatures,
- To provide vertical features within the streetscape to aid legibility/way finding and safety for road users, and
- To soften and humanise the built form of the city, contributing to Auckland being a Liveable City.

The scope of these guidelines includes the approach to selecting the appropriate species, the planting, and maintenance of vegetation located in the public road corridor. The public road corridor in this instance also includes road to road walkways connecting one public road to another, paper roads, shared and civic spaces both within urban and rural areas. These guidelines also address the root intrusion into public water services, street gardens, berm mowing and canopy clearance around power lines and street lights.

Vegetation located in parks, reserves, along stream edges and coastal margins is covered by AC policies. Trees and vegetation planted along private right of ways or on private land are the responsibilities of the land owner.

The planting and management of trees and vegetation in the road corridor should complement the planting in adjacent parks and reserves (undertaken by AC Parks and Biosecurity) and undertaken through other Council-supported projects.

An important principle underlying these guidelines is the desire by AC Parks and AT RCM for a cooperative approach in agreeing on the location of proposed street trees. AT has ultimate responsibility for the selection of species and location and the ATCOP provides guidance on this.

The guidelines also recognise the specific provisions which apply in the Waitakere Ranges Heritage Area (WRHA) and the provisions of the WRHA Act (2008) and differences in approach which should apply between the urban and rural parts of the region. Further details on the design of infrastructure within the WRHA are provided in the ATCOP.

## 5. Guidelines

### 5.1 Selection of Species and Planting Locations

AT supports established arboricultural standards to promote the establishment of well-formed mature street trees.

When preparing maintenance programmes and developing landscape plans for a new development or new street tree planting, the Project Manager must demonstrate consideration of the following:

- Final scale of the mature tree(s) or shrubs relative to the surroundings, particularly in terms of mature road clearance and visibility.
- The extent of root growth and management – sufficient provisions shall be made for enabling root growth without causing damage to footpaths and pavements.
- Supporting biodiversity by the appropriate selection of a variety of species – preference shall be given to landscape designs that support native biodiversity through use of native trees and vegetation.
- The biological requirements of the species in the chosen location (such as soil, irrigation and drainage).
- Soil type, its permeability and any potential drainage requirements for tree growth.
- The susceptibility of the species to weather damage or vandalism. Vandalism is difficult to foresee and is not species specific.
- The site requirements such as visual sight line clearances.
- For plantings, specifications shall require trees to have a minimum canopy clearance of 1 metre above ground level at time of planting.
- Pest and disease tolerance of the species.
- Potential conflicts with the surroundings such as leaf/flower fall and, root/branch encroachment.
- The on-going maintenance requirements and associated costs.
- Site environmental factors such as wind exposure, coastal spray and shading from tall buildings or steep hillsides.
- The opportunity to relocate existing mature species to parks and renewing the street landscape.
- Location of utility services within the road corridor, including future utility corridors. New developments shall incorporate utility corridors, separate from road verge areas where tree planting is to occur.
- Access to adjacent property, including proximity to vehicle entrances and sight lines at vehicle entrances.

Native species are generally preferred; however, exotic species may be ecologically appropriate for the conditions, particularly where specimen or deciduous trees (to reduce winter shading) are desired. Some exotic species can tolerate a wider range of site conditions, and in some instances can be less costly to establish. Where native trees or vegetation is selected, the species should be eco-sourced from the Auckland region, wherever possible. The species for consideration are listed in the ATCOP. If specie of tree that is not included in the ATCOP is desired, the Project Manager/Developer must seek approval from the AT Asset Manager, prior to submitting any vegetation planting plans or consent applications.

The ATCOP identifies the appropriate locations within the berm for planting street trees to minimise the impact on service corridors.

Requests for planting fruit trees should be directed to the Volunteer and Biodiversity Coordinator for the sector at AC for the inclusion of fruit trees into community gardens and local sports parks. Fruit trees proposed for the road corridor may be considered on a case by case basis by the AT RCM.

### 5.2 Planting Structures

When new street trees are proposed, provision must be made for accommodating the future potential canopy and root growth. Where the anticipated root growth of the selected species at maturity is likely to cause conflict with the road pavement, footpaths, network service utilities and the like, an alternative species should be considered unless the proposed tree(s) is planted using an appropriate planting structure or root deflection system. The preferred minimum soil volumes for new trees are provided in the ATCOP.

Trees selected for the redevelopment of special amenity areas (such as the CBD or beach front locations) and town centres must be selected in consultation with an arborist with AT RCM responsible for the final approval.

When considering the installation of planting structures such as planter boxes or tree pits the following must be considered:

- Any support necessary for pavement loading
- Potential impacts on adjacent infrastructure such as pavements, footpaths, services over the whole life of the tree or vegetation
- Above ground stability structures such as stakes
- Sufficient drainage to prevent soil water logging and ingress into pavement structure
- Measures to direct root growth to protect pavement formation and underground services
- Provision for sufficient soil media to support root growth after planting. Engineering interventions such as slots or trenches filled with media to encourage extended growth may be required. Load support structure elements may need to allow roots to develop through and beyond them without constriction.
- Ability of the structure to utilise stormwater as an irrigation source (see the Stormwater in Road Corridor Guidelines. Methodology of irrigation and drainage during establishment
- Long term maintenance of the selected species. The incorporation of simple cost effective design features to enable easy access to tree planting structure.
- Provision to modify surrounding structures to accommodate long term growth.

The performance standards and specifications for planting structures are detailed in the ATCOP. The planting structures must be registered on the AC Parks asset register for maintenance and renewals programming.

For new developments appropriate root barrier systems shall be incorporated into the design to protect the road carriageway, kerb and channel, sub soil drainage and utility corridors in accordance with Standard Engineering Designs where road verge tree plantings are planned – refer to ATCOP for detail.

### 5.3 Waitakere Ranges Heritage Area

AT seeks to protect and where practicable restore and enhance native vegetation and habitat for native species within road corridors in the Waitakere Ranges Heritage Area and rural areas within the Auckland region (i.e. outside the Rural Urban Boundary). AT will work closely with AC to ensure The Local Area Plans for the WRHA are considered in the design on new infrastructure or renewals.

Within road corridors in the Waitakere Ranges Heritage Area, and rural areas in the AC area, planting, replanting and assisted regeneration should make use of indigenous species which have historically and naturally occurred in a similar environment in the immediate area, and which are, as far as reasonably possible, of local genetic provenance.

Disturbance and removal of native vegetation within the WRHA road corridor, other than to address safety or property protection issues, must be kept to the minimum necessary for the purpose.

The WRHA Design Guide in the ATCOP provides direction on proposed new developments and changes for project managers to consider. Departures from this approach within the Waitakere Ranges Heritage Area which are not consistent with the WRHA Act or a Local Area Plan prepared under the Act should be subject to consultation with the Asset Management Team in the first instance. Consultation with the Waitakere Ranges Local Board may also be required where the proposed developments or designs are substantively different from the Design Guide or WRHA Act provisions.

### 5.4 Maintenance

#### Establishment Period

All planting must be assessed and signed off by AC Parks as appropriate and complete, and the signed document should be passed to the relevant subdivision/building consent officer. Upon completion of the plantings the developer should obtain AT/AC parks sign off for completion of installation and then lodge a

maintenance bond with the council. This allows the council to issue the 224C so the developer can sell or develop individual sections within the subdivision.

The developer must ensure that all consent conditions for the establishment of vegetation in the road corridor are complied with, including the preparation of a Vegetation Maintenance Programme for approval by AT if required. Developers must undertake the maintenance of all vegetation planted as part of their development for a minimum period of 24 months. The developer may choose to engage AC Parks maintenance staff to remedy any substandard maintenance during the establishment phase, or request their own contractor to undertake these works. Gardens and low level planting is subject normally to a 12 month maintenance period. The same process as tree planting would apply for any street gardens in traffic islands, roundabouts, central medians etc. The maintenance bond will be released in full if all plantings are accepted, however the bond may be used by the council to carry out any remedial works required if the plantings are not in good order at the end of the maintenance period.

In new subdivisions or as part of a work approval permit, the developer/contractor is responsible for any necessary reinstatement to the berm, and is responsible for grass establishment and at least the first three cuts prior to hand over to AT/AC as part of the vesting process.

### **Asset Register**

To ensure the appropriate maintenance of vegetation planted in the road corridor as part of the new development or replacement of existing trees (or other vegetation), all planting should be registered on the AC Parks asset register. The asset information must be made available to the AT Assets team for future road maintenance and renewals programming for street trees and gardens.

### **Topping of trees**

The topping of trees is not a practice supported by AT RCM or AC Parks. Trees that are topped are more likely to decay and develop structural problems with the resultant re-growth. Any topping required must be undertaken in accordance with the Management Approach for Works on Street Trees.

Trees in the road corridor may be considered for topping only in exceptional circumstances where:

- Topping is appropriate to that species. (The pollarding of Plane trees)
- The tree has been topped or a height reduction practice has existed in the past and other management options are not considered arboriculturally appropriate.
- Clearance of power lines (see below), traffic signs or lights (Section 5.9), or to meet other statutory requirements necessary.
- The trees (or tree) form part of a formally planted and maintained hedge. Boundary hedges are excluded unless otherwise agreed to by AC Parks and AT RCM.

### **Pruning (Canopy/Branches)**

AT supports the established arboricultural standards for pruning to promote the establishment of well-formed mature trees and minimise the risk to the public or property. All tree pruning and maintenance must be undertaken in accordance with the TMP.

A regular pruning and maintenance programme for trees and/or vegetation growing within the road corridor should be undertaken to ensure accessibility, safety, maintenance and/or visibility of:

- Footpaths or roads,
- Street/traffic lighting,
- Vehicle and pedestrian access to public areas,
- Traffic signage and visibility at intersections,
- Significant public views from the road or footpath specified viewing areas such as view shafts, and
- Access to adjacent property.

Blocking private views and casting shade are not adequate grounds for pruning. Pruning of trees or vegetation in the road corridor for the purpose of maintaining a private view may only be undertaken in exceptional circumstances where there has been an historic practice to this effect and there is documented evidence of the right to a view.

## Power Line Clearance

Pruning should be undertaken to ensure clearance requirements around power lines/cables in the road corridor in accordance with the Electricity (Hazards from Trees) Regulations 2003. Trees are generally pruned *around* overhead wires rather than being topped or reduced in height.

For trees growing on private property, it is the private property owner's responsibility to maintain tree canopy clearance from power lines.

## Private Vegetation Overhanging the Road Boundary

Private owners are required to prune or remove vegetation (for example, a hedge) that overhangs a footpath or encroaches onto the road corridor in accordance with the *'AT Guideline on Road Surface, Airspace, and Subsoil Encroachment'*, and the AT Road Encroachment policy.

## 5.5 Mowing of Berms

AT requires the adjacent property owners/occupiers to mow the grass berms located in front or to the side of private property. Maintenance requirements include regular mowing and removal of grass/weed species which may block the kerb and channel.

Where stormwater management assets (planted swale, rain garden, tree pit etc.) are located within the berm of a property, the owner of the stormwater assets should maintain the vegetation within those assets only in accord with an agreement to do so. This is to avoid inappropriate maintenance, such as keeping swale grass cut short, or incorrect pruning practices.

AT will mow grass berms in situations where:

- the berm is steep and mowing poses a significant safety hazard (1:4 gradient)
- the berm is not to the front, side of, or directly accessible from the property
- in town centres or major commercial centres
- within road corridors at shopping centres
- in front of unoccupied properties and non-maintenance will result in a traffic or fire hazard and impact negatively on visual amenity; or
- there is a swale, rain garden, overland flow path, open channel, drain or other stormwater asset within the berm; and specific maintenance requirements can best be delivered by AT managing it.

If residents or landowners are unable to or unwilling to mow the grass berms outside their property, then AT will maintain it, on an as-and-when-required basis. The timing and frequency of this service is at the discretion of AT and will vary depending on seasonal growth of the grass.

The berm outside a Council owned property e.g. park, community building or office, civic or shared spaces and town centres is the responsibility of AC. All reinstatement within the road corridor should be in accordance with AT's requirements.

In rural areas, AT will mow the berms to maintain sight distances and visibility on banks, at intersections, sharp bends, driveways, and to maintain the height of grass on the shoulder and in surface water channels.

## Machine Trimming

Trimming of vegetation and bush in rural areas by mechanical means is generally the most practicable option. However, if flail mowing is used then a best practice approach to weed hygiene is required to prevent relocation and establishment of weed species. Refer to the AC Policy on Weed Management.

Road side drains must be checked post-mowing to ensure fallen debris is not blocking drains. Regular mowing results in a visually softer appearance, reduces the likelihood of uncut or damaged branches encroaching into the road corridor, and reduces the plant litter dropped on the ground (potentially blocking drainage).



## 5.6 Replacement of Trees

From time to time it may be necessary to replace a damaged and/or diseased tree. The new tree species should be selected using on the criteria and lists provided in the ATCOP. Like for like replacement is not always acceptable and selection of the new species and its' location within the road corridor must be approved by the AT Asset Manager.

## 5.7 Removal of Trees

Trees will not generally be removed from the road corridor to preserve views, remove shading or for the control of leaf litter. Removal of trees from the road corridor may be considered in the following situations:

- To resolve an identified or potential safety issue;
- The tree/vegetation is causing on-going damage to adjacent infrastructure and there are no other practicable options to overcome the damage;
- To accommodate necessary road and network utility upgrade/renewal works
- As part of an approved development or consent.

Any tree removal works carried out by AT or a NUO are to be in accordance with the *Management Approach for Works on Street Trees* and relevant operative plans

All tree removal works are to be co-ordinated where possible with AC Parks annual replacement planting regime and include appropriate consultation with the local community.

Any tree removal works required that are not addressed above must be directed to the AT Asset Manager in the first instance. The Asset Manager may consider the removal of trees on a case by case basis after taking into account a technical assessment by an arborist, the feasibility of alternative solutions (to mitigate any damage or relocate the tree) and Proposed Auckland Unitary Plan requirements.

## 5.8 Gardens in Road Corridor

### Formal Gardens

All planted gardens in the road corridor (being along medians, roundabouts and/or in berms) are maintained by the AC Parks. In selecting the plant species for road corridor gardens consideration must be given to:

- Frequency/requirement of plant replacement (annual vs. perennial) and weeding/pruning/irrigation,
- Traffic management costs – during implementation and maintenance,
- Safety of maintenance contractors/staff whilst carrying out the maintenance, and
- Sight lines for traffic safety.

While it may be desirable to provide visual amenity features along the road corridor, the cost and safety implications associated with high maintenance annual gardens must be carefully considered against the on-going contractor safety and traffic management costs.

New gardens, established as part of a new residential development must consider the use of low maintenance/irrigation planting designs and be in accordance with ATCOP.

### Berm Planting

Private planting in the road corridor, particularly the berm, is not encouraged by AT. All proposed planting must be approved by AT and must be in strict adherence to the AT Road Surface, Airspace and Subsoil Encroachment Guideline. Any plants approved by AT and planted by private residents must be maintained by the resident to ensure visibility along the road is maintained, and access along an adjacent footpath and carriageway is not compromised. Residents must also be aware that access to utility services located within the berm by Network Utility Operators may result in the plants being removed at short notice – residents will not be compensated for the loss of plants and the plants will not be reinstated by AT or the Network Utility Operator.

## 5.9 Trees and Street/Traffic Lights

Existing trees must be maintained and pruned to ensure existing street/traffic lights are not obstructed. When selecting and locating new street trees, the project manager must comply with the AT Guidelines for Street Lighting and the ATCOP.

Where renewal programs for existing street & traffic lighting are proposed the designer shall ensure that the lighting proposals consider the impact on existing trees. Where possible the lighting should be located to minimise the impact on the trees.

Similarly where OHUG (over-head and underground power line) projects take place in conjunction with utility companies, the overall design must also take into account existing trees and identify where potential impacts can be mitigated to ensure the design optimises the new positions of lighting columns and aims to keep these structures clear of any existing established trees. Tree removal and renewal may be considered by AC Parks and AT RCM.

## 5.10 Trees and Drainage

Where a tree on private property is damaging a public drain, water mains or sewage line the issue should be raised with the relevant drain owner. The owner of the tree must be informed of the issue and in consultation with the drain owner, may be requested to remove the tree/remedy the issue and pay for the drain/pipeline to be repaired and reinstated in accordance with Section 68 of the Local Government Act (1974) and the Local Government (AC) Amendment Act S63g (2010).

Where a tree located in the road corridor is blocking a private drain, the affected landowner should inform AT in the first instance. AT should seek advice from an arborist and undertake to remove or remedy the issue and reinstate the drain in collaboration with the SW Asset Manager/Watercare Manager and the AT RCM. The agreed approach may be generic, area based or case specific. The private fence (or legal property boundary in the absence of a fence) defines the boundary in terms of ownership.

## 5.11 Trees and Infrastructure

Where a tree is damaging infrastructure such as a road pavement, drain, footpath or a structure in the road, an assessment should be made by AT with advice from an arborist. The agreed approach may be generic, area based or case specific.

If it determined that on-going damage to the infrastructure is likely and the most practicable option is to remove the tree then this should be carried out in accordance with section 5.7 of this guideline. Where a tree's roots are blocking a drain located in the road corridor, retention of the tree will generally take precedence and the general practice should be to remove and relay the drain.

## 5.12 Trees and Stormwater

Trees and other vegetation may be planted in the road corridor for the purposes of contributing to the attenuation of stormwater drainage such as wetlands and rain gardens. The design of the drainage system, selection of the plant species and the planting environment should be undertaken in accordance with ATCOP and the AT Guidelines on Stormwater in the Road Corridor.

Species selection, planting environment, establishment management and Operation & Maintenance Manuals must be approved at design stage by AT in collaboration with the SW Asset Manager and AC Parks, in accordance with the ATCOP.

## 5.13 Special Amenity Areas

Trees to be located in special amenity areas (such as the CBD, town centres or beachfront road corridors) require the approval of AC Parks and AT RCM and should be in accordance with the ATCOP and the AT Guidelines on Street Amenities.

## 5.14 Trees on Private Property

AT has no jurisdiction over and does not become involved in issues about trees and/or vegetation growing on private property unless the tree/vegetation overhangs and obstructs parts of public footpaths and/or roads, or causes damage to roading infrastructure. In these circumstances AT may request the owner to prune or remove any tree/vegetation that encroaches on the road reserve. Under some circumstances the tree/vegetation owner may apply to AT for a licence to encroach onto the road reserve. Private owners are referred to the AT Road Surface, Airspace and Subsoil Encroachment Guideline and Policy documents.

## 5.15 Requests for Weed Control

Weed removal and control of nuisance species in the road corridor is covered in the AC's Policy on Weed Management. While AT is responsible for the removal and control of weeds in the road corridor, residents or business owners requiring a weed to be removed from private property or a private road, should contact AC in the first instance. The Biosecurity team may consider removal/control of such weeds on a case by case basis, depending on the weed species and reason for removal.

## 5.16 Priority Weeds

The Regional Pest Management Strategy (RPMS) requires, in Section 4.2 (p17) and Section 18.1.1 (p160) that the owner/occupier of the road reserve creates and implements management plans to control specified pest plants. The various memoranda between AC and AT confirm that AT has responsibility for the management of road reserves in the Auckland region (outside of the state highway network).

Note there is no requirement for AT to manage pest animals in the road corridor.

The Regional Pest Management Strategy (RPMS) details a list of weed species that shall be managed in the region by way of removal or by monitoring and surveillance. It classifies weeds into pest plants and weed species and provides a strategy for management in terms of removal (total control) down to surveillance. The pest plants are designated as described below. Plant species may be declared under one of the categories below throughout the entire Auckland region or in specified areas only.

*Total Control:* The Biosecurity team carries out or arranges for all control work for total control pest plants at no expense to the landowner/occupier. These plants are also banned from sale, propagation, distribution and exhibition within the Auckland region.

*Containment:* Landowners/occupiers are required to carry out the control work on their property. All containment pest plants are also banned from sale, propagation, distribution and exhibition within the Auckland region.

*Surveillance:* There are no requirements for control of existing specimens; however, these plants are banned from sale, propagation, distribution and exhibition within the Auckland region.

*Community Initiatives:* Programme: Community groups may nominate any pest plant in the Strategy on which to carry out control work collaboratively.

The Biosecurity team is responsible for the RPMS in terms of reviewing and amending the list of weeds.

## 5.17 Pest Plants

Environmental weed control or areas where specialist treatment is necessary shall be undertaken using the least toxic but effective medium and applied in accordance with the AC Policy on Weed Management. The method of control should follow any guidance issued for that species and be appropriate to the site and circumstances. Stump treatment of environmental weeds must be carried out wherever possible instead of spraying.

AC Biosecurity staffs are available at all times to assist AT in developing roadside management plans, to ensure that treatment methodologies are:

- Appropriate for the existing or desired groundcover.
- Integrated and efficient (e.g. treatment regimes cover multiple species wherever possible to minimise need for repeat visits).

- Safe (i.e. comply with Council's Air, Land & Water Plan, all legislation) and community risk-averse (e.g. include non-spray options wherever possible).
- Seasonally timed for maximum effectiveness (e.g. greatest control level, lowest herbicide rates).
- The most cost-effective over the short, medium and long term.

## 5.18 Weed Hygiene

A best practice approach must be undertaken to ensure that weeds physically removed or cut are not allowed to be transferred to adjacent/other areas by unclean equipment or ineffective disposal methods.

## 6. Monitoring and Review

These guidelines shall be reviewed in 12 months and thereafter as part of the three year review cycle aligned to the LTP.

## 7. Related Guidelines

The performance standards and detailed specifications for the provision of lighting in the road corridor are given in the ATCOP which incorporate the AT's Guidelines on Street Lighting.

Private owners with vegetation that overhangs or encroaches onto the road corridor are referred to the AT Road Surface, Airspace and Subsoil Encroachment Guideline.

All planting for the purposes of stormwater drainage and attenuation must be in accordance with AT's Guidelines for Stormwater in the Road Corridor.

Watercare relies on the Local Government Act (1974) S68 and the Local Government AC Act (2009) S63g to address damage of drainage assets as a result of root intrusion from private trees/vegetation. Veolia, the drainage asset manager in Papakura/Franklin, addresses the issue of root intrusion or other damage in the relevant customer agreement.

Weed removal and/or control of nuisance species in the road corridor is covered in the AC policy on Weed Management.

The AT Guidelines on Street Amenities should also be considered when planting trees in special amenity areas.

The TMP for work on or near street trees should also be considered by NUOs.

## 8. Document Status

Owner (contact for updates, clarity etc.)	Siri Rangamuwa Asset Management Planning Manager	
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