The Tree Consultancy Company PO Box 35-284 Browns Bay Auckland, 0753 **Sean@TreeConsultancy.co.nz** +64 21 209 4821 0508 TREE CO (873 326) TreeConsultancy.co.nz



Arboricultural Report

Warkworth North Private Plan Change

on Notable Tree Assessment

Prepared for

Burnette O'Connor Barker and Associates Prepared by

Sean McBride Director

DATE Job ref # 18 September 2018 1105

Contents

		Page
1	Introduction	3
2	Project Scope	3
3	Assessment Methodology	4
4	Significant Trees within the Structure Plan Area	5
5	Potential Adverse Effects on Trees	7
6	Conclusions and Recommendations	7

1 Introduction

1.1 The Tree Consultancy Company has been commissioned to carry out notable tree assessments on significant trees that may be present with the Warkworth North Private Plan change area. It is proposed to change the zone of the land to a mix of business, residential and potentially open space. Figure 1 below shows the boundary of the Plan Change Area (thereafter referred as the study area).



Figure 1 – Plan Change Area is shown with red line

- 1.2 Under the Auckland Unitary Plan (Operative in Part) the structure plan area is zoned Future Urban. A Significant Ecological Area (SEA_T_2294) is present over vegetation within the southern corner of the study area. No trees listed in Schedule 10 of the Auckland Unitary Plan (Notable trees) are present.
- 1.3 The location of trees that have been assessed are indicated in *Attachment 1* and are referenced by number in *Attachment 2*, and throughout this report. For those trees that warrant a notable tree evaluation, a completed form is attached as *Attachment 3*.

2 Project Scope

- 2.1 The scope of this study is to identify trees that are considered to be significant enough to warrant further assessment, and to carry out a notable tree evaluation of those trees, using Council's Notable Tree Assessment Form that was formally adopted during the Proposed Auckland Unitary Plan notified hearing process.
- 2.2 Not all of the Plan Change area was inspected. Those properties not surveyed are listed in Table 1, and are shown in Figure 2 below:

Legal description	Legal description	Legal description	Legal description
Lot 1 DP 508375	Lot 3 DP 209013	Lot 2 DP 509795	Lot 2 DP 336399
Lot 1 DP 62969	Lot 1 DP 204539	Lot 2 DP 431845	

Table 1 – Properties not surveyed



Figure 2 – Properties not surveyed

2.3 The pockets of bush located to the south of Falls Road currently have protection status through the Significant Ecological Area overlay. Given there are already protected, this area was not requested to be inspected.

3 Assessment Methodology

- 3.1 In the course of undertaking my assessment, I have reviewed the following documents:
 - Section 32 assessment report prepared by Barker and Associates, dated 21 March 2018
 - Ecological Assessment prepared by Bioresearches dated 13 December 2017 and revised 5 March 2018
 - Ecology Supplementary report prepared by Bioresearches, dated 21 June 2018, and
 - Landscape Assessment prepared by Littoralis Landscape Architecture, dated February 2018
- 3.2 A site walk over was carried out on the 9th of August 2018 where a brief ground-based visual inspection of the existing tree stock to the north of Falls Road was carried out. Weather conditions were fine, and there was unrestricted access through the study area.
- 3.3 The identification of 'significant' trees that are located within the study area was initially carried out by a desktop study; then the verification site visit was completed. Only those trees that were deemed worthy of undertaking a further assessment were inspected. Such trees included (but were not limited to) mature trees thought to be reaching up to and greater than 80 years old, solitary mature specimens, trees with visually good or very good form (and shapeliness), etc.
- 3.4 Trees that potentially could be classed as significant were evaluated using the Council's Notable Tree Assessment Form, and the Guideline for Nominating a Notable Tree for Evaluation form was followed.
- 3.5 The evaluation form comprises four categories; Age and health, Character or form, Size and Visual contribution. A brief description of how each category was scored is detailed in Section 4.

4 Significant Trees within the Structure Plan Area

4.1 Nine trees or groups of trees have been plotted on the Tree Location Plan (*Attachment 1*). Five of these trees have been assessed against the Notable Tree Assessment Form, with two scoring greater than 20 points. Trees scoring greater than 20 are considered significant enough to warrant inclusion within Schedule 10 of the Auckland Unitary Plan (Notable Trees). The nine trees, or group of trees, are briefly described below.

4.2 <u>Tree 1</u>

- 4.2.1 Tree 1 is a group of mature totara located near the northeastern corner of the study area. They are estimated to have an average age between 80 and 100 years old. Their health has suffered over the years due to the grazing of stock beneath, and the associated soil pugging that occurs. Some trees do show signs of vigour, however this is assessed to be below average. Scoring for Age and health is therefore 5.
- 4.2.2 The character and form of the trees are not exceptional for the species. They have good shapeliness, and there is no known particular relationships or attributes that make them unique. Scoring for Character and form is therefore 0.
- 4.2.3 The size of the trees has almost certainly been stunted through the use of the land and the associated root disturbance with stock grazing. Scoring for Size is therefore 0.
- 4.2.4 The group is tucked in a gully, and they have little or no visibility from public roads. A handful of private properties can be seen from the stand of totara. Scoring for visual contribution is 2.
- 4.2.5 There are no known special factors (Section 8 of the Notable Tree evaluation) that would trigger scheduling of the totara group.

4.3 <u>Tree 2</u>

- 4.3.1 Tree 2 is a mature kauri that stands at approximately 12m in height. It is a stand-alone tree positioned between Tree groups 1 and 4. The health of the tree has suffered from soil compaction and disturbance with the use of the land. The canopy is sparse, and foliage is small for the species. These are indicators of plant stress.
- 4.3.2 A conservative age estimate is between 80 and 100 years. Given the trees condition, it scores 5 for Age and Health.
- 4.3.3 There is nothing exceptional of the character or form of the tree, and its size is comparable for other species in the local area. Scoring is therefore 0 for both Character or form, and Size.
- 4.3.4 As with Tree 1, the tree is tucked in a gully, and it has little or no visibility from public roads. Scoring is also 2 for visual contribution.

4.4 <u>Tree 3</u>

4.4.1 Tree 3 is a coast banksia (*Banksia integifolia*) located on a ridgeline and is visible from various paddocks. This species is a pest plant and not worthy of undertaking an evaluation.

4.5 <u>Tree 4</u>

4.5.1 Tree 4 is a large group of mixed native species. The western half of the group primarily comprises mature totara in good condition. The eastern half comprises various native species, including rimu,

tanekaha, nikau, kanuka and kawaka. The overall condition of the native species is good. Several over-mature pine trees are also within the group. Their removal will be a benefit to the native vegetation.

- 4.5.2 The average age of the trees is assessed to be between 80 and 100 years. Much of the ground area beneath has been excluded from stock grazing, therefore less ground and root disturbance has occurred. The stock exclusion has resulted in a group of natives with good vigour and vitality. Scoring for Age and Health is 8.
- 4.5.3 There is nothing considered exceptional about the character or form of the trees, however, the group does contain a fairly large kawaka tree, and some of the totara are tall for their age. Scoring for character or form is 0, and the Size is 5.
- 4.5.4 This group of trees is visible from main roads, and therefore they score 10.
- 4.5.5 Tree 4 scores 23 points and as a group (with the exclusion of the mature pine trees) warrant inclusion into Schedule 10 of the Auckland Unitary Plan.
- 4.6 <u>Tree 5</u>
- 4.6.1 Tree 5 is a solitary totara located near the western boundary of the study area. In my view, it is not a specimen worthy of undertaking an evaluation.

4.7 <u>Tree 6</u>

- 4.7.1 Like Tree 3, Tree 6 is a large group of mature native trees, with the northern and western portions comprising totara. The central and southern reaches of the group include diverse native species and comprise tanekaha, titoki, kahikatea, karaka, black maire, rewarewa, tanekaha and puriri.
- 4.7.2 The group contains a single and dominant overmature puriri tree that is located northeast of the group centre. It is a particularly large specimen of the species.
- 4.7.3 Tree 6 possesses similar attributes to Tree 3, therefore the scoring for each catergory is the same, with 23 points being awarded. Tree 6 warrants inclusion into Schedule 10 of the Auckland Unitary Plan.

4.8 <u>Tree 7</u>

4.8.1 Tree 7 is a group of three mature totara trees that have been subjected to historical ground and root disturbance. Their overall health is fair, and they are therefore not specimens worthy of undertaking an evaluation.

4.9 <u>Tree 8</u>

4.9.1 Tree 8 is a group of mature Monterey pine trees with a scattering of totara surrounding. Given the fair condition and early mature age of the totara, the group as a whole is not of sufficient quality to warrant evaluation

4.10 <u>Tree 9</u>

- 4.10.1 Tree 9 is almost certainly a mature rough-barked gum (*Eucalyptus viminalis*) that stands at approximately 18 m in height. Given it is a fast-growing species, I have estimated the age of the tree to be less than 80 years.
- 4.10.2 Although the tree has been subjected to stock grazing beneath, it displays good health and vitality. For the root disturbance that has occurred beneath, there is little twiggy dieback in the canopy, and the foliage appears to be consistent with the species. The tree, therefore, scores 6 in the Age and health category.

- 4.10.3 In my view, there is nothing exceptional about the character or form of the tree. For a tree growing in an open environment, it displays good shapeliness (rather than exceptional). The size of the tree is also average for the species growing in this type of environment. Tree 9, therefore, scores 0 for both character or form, and size.
- 4.10.4 The tree is visible from main roads, and it scores 10 for visual contribution.
- 4.10.5 Overall Tree 9 scores 16 points, less than the 20 required to qualify for inclusion in Schedule 10 of the Auckland Unitary Plan.

5 Potential Adverse Effect on Trees

- 5.1 Potential adverse effects to trees from development include, but are not limited to:
 - Excavations associated with contouring, filling, top-soil removal, soil stripping, etc.
 - Changes to water availability; such as water table, overland flow paths, reduce rainfall availability, soil desiccation, flooding, impermeable paving construction under trees, etc.
 - Changes to wind and sunlight availability; such as modified wind loadings from building construction (wind tunnelling), wind exposure from adjacent tree removal, modified sunlight exposure, etc.
 - Removal of adjacent trees and felling damage.
 - Location and construction of services and drains (both above and below ground level).
 - Finished floor and ground levels in relation to nearby trees (i.e. over the sensitive root system).
 - Excavations associated with hard and soft landscaping near, and beneath, trees.
 - Installation of silt and sediment control.
 - Construction access and work areas; the potential for damage and compaction from machinery access over sensitive root systems.
 - Storage areas for construction materials, machinery, spoil, etc.
 - Spills and runoff toxic to sensitive tree roots.
- 5.2 Most of the above, in my experience, is addressed during the specific design and resource consenting stage of developments. It is not uncommon for tree sensitive designs and tree protection procedures to be implemented during the consenting stage of works. Assessing and addressing potential effects on trees during different stages of the development would be needed at the resource consent stage when more specific details are available.

6 Conclusion and Recommendations

- 6.1 It is proposed to change the zoning of the study area to enable urban land uses including a mix of business, residential and open space. The trees within the proposed plan change area have been assessed to determine if any are of a level of significance that warrants their protection under Schedule 10 of the Auckland Unitary Plan (Notable trees).
- 6.2 Five trees or groups of trees have been evaluated using the Council's Notable Tree Assessment Form that was formally adopted via the Proposed Auckland Unitary Plan notified hearing process. Of these, Trees 3 and 4 score more than the required 20 points.
- 6.3 Trees 3 and 4 comprise groups of mature native vegetation, with some notable examples of various species within. Their protection via Schedule 10 of the Auckland Unitary Plan is recommended.
- 6.4 Tree 3 contains over mature monetary pine trees. Their removal will benefit the native trees, therefore, all *Pinus radiata* species within the group is recommended to be excluded from Schedule 10.

6.5 Some potential adverse effects to trees from development are outlined in Section 5 of this report. Where trees are proposed to be retained, the potential impacts to trees, I understand, will need to be addressed at the resource consent stage where tree protection procedures and tree sensitive designs can be implemented. Should the land be rezoned, it is recommended that arboricultural input is sought on the design and consenting stage of the works; particularly with regards to earthworks near retained trees.

Signed

Sean McBride Director The Tree Consultancy Company

29 August 2018

<u>Attachments:</u> *Attachment 1 –Tree Location Plan Attachment 2 – Tree List Table Attachment 2 – Notable Tree Assessment Form*









Legend





Attachment 2 – Warkworth North Private Plan Change Tree List Table

Tree #	Species	Common name	Height (m)	Overall vitality	Branch structure	Shape	Age	Arboricultural comments and observations	Evaluation Score	Notable worthy
1	Group of natives Podocarpus totara	Group of natives, mainly Totara	16	Fair	Fair	Good	Mature	Group of totara. One kahikatea in group. Health fair due to pugging and stock grazing. Small trunk diameter to 2000mm girth. Grass beneath very wet under foot. Fair stand of trees. In valley. Not visible from public land.	7	No
2	Agathis australis	Kauri	12	Poor	Good	Fair	Mature	Tree suffered from use of the land. Fair health. Limited ability to retain foliage duff beneath tree, which is important for the species. Very small leaves	7	No
3	Banksia integrifolia	Coast banksia	8	Good	Poor	Fair	Mature	Pest plant species	N/A	No
4	Group of natives Podocarpus totara	Group of natives, mainly Totara	20	Good	Good	Good	Mature	Less stock grazing beneath these trees. Quite open beneath. Mature pines on southern group edge that should be removed. One in poor health with failures. Group is visible from quite a distance	23	Yes
5	Podocarpus totara	Totara	9	Good	Good	Good	Mature	Solitary tree near boundary. Some soil pugging beneath. Not worthy of undertaking an evaluation	N/A	No
6	Group of natives Podocarpus totara	Group of natives, mainly Totara	18	Good	Good	Good	Mature	Mainly Totara group, with Kanuka, karaka. Very large kahikatea and puriri	23	Yes
7	Podocarpus totara	Totara	9	Fair	Good	Good	Mature	Tip dieback occurring. Heavily pugged beneath. Slight yellowing of foliage. Fair health. Group of two further uphill not assessed. Poorer health. Trees are visible from falls road	N/A	No



Attachment 2 – Warkworth North Private Plan Change Tree List Table

8	Pinus radiata	Monterey pine	20	Fair	Fair	Fair	Mature	Mature pines with smaller and younger totara beneath. Totara to approx 8m in height. None individually notable.	N/A	No
9	Eucalyptus viminalis	Rough-barked gum	18	Good	Good	Good	Mature	Area beneath the tree is used for stock grazing. Tree shows good signs of vigour.	16	No





Attachment 3 – Warkworth North Private Plan Change Notable Tree Assessment Forms

Section 6: Tree-specific factors (see following page for scoring)



A tree can be scheduled as Notable if it achieves a score of 20 or more

(-	Sco		Comments
Age and health Is notable because of its age (e.g., the oldest of its species in Auckland) and there is something about the vigour and vitality of the tree or group of trees which makes it notable given other factors (such as its age)		atory notes)	
Character and form Is an exceptional example of the species in character and/or form (i.e., text book shape or has a particular relationship with its environment) or attributes that makes it unique			
Size It is an exceptional size for the species in this location (including height, girth or lateral spread)			
Visual contribution It makes a significant contribution to the visual character of an area or to the vista from elsewhere in Auckland			
Section 7: Negative effects			
Are there any matters that weigh against protection at this location?	the tree'	s long term	
Hazard and negative effects	YES	NO	
Does the tree present negative impacts upon human health and / or property?			
Are these negative effects manageable through arboricultural or property management means?			
Is the tree species listed in the Regional Pest Management Strategy as a Total Control or Containment Plant or listed under the Biosecurity Act 1993 as an Unwanted Organism?			

Scoring of tree specific factors



Age and health

Vigour	High	3	5	6	8	10
and	▲	2	4	6	8	8
vitality		2	4	6	6	7
		2	4	4	5	5
	Low	2	2	2	3	3
	Age in Years	<40	41- 60	61- 80	81- 100	>100

Character or form

Not exceptional	0
Exceptional example locally	5
Exceptional example in Auckland	10

Size

Average size for the species in this location	0
Greater than average size (up to 25% larger)	5
Substantially greater than average size (>25% larger)	10

Visual contribution

In backyard or gully	2	e.g. fewer than 100 people see the tree daily
Local park/community/ beside minor road or feeder road/catchment	5	e.g. between 100 and 5000 people see the tree daily
Main Road/motorway or higly visible landform	10	e.g. more than 5000 people see the tree daily

This scoring system should be used when assessing the age and health of a tree. It allows for trees that are old and healthy to score much more highly than trees that are either unhealthy or young. The degree of vigour and vitality for any tree is assessed given the age of the tree. Therefore, a tree that is over 100 years old and showing high vigour and vitality, for a tree that age, will score a 10.

This scoring system should be used when assessing the character or form of a tree. It allows for trees that are exceptional examples at two spatial scales (from local to Auckland-wide) to score more highly than trees that are regarded as normal.

This scoring system should be used when assessing the size of a tree (including height, girth and lateral spread). It allows for trees that are larger than would be expected (on average) for a particular location to be scored more highly than trees that are at, or close to (or below), their average height.

This scoring system should be used when assessing the visual contribution of a tree. It allows for trees that are seen by more people on a daily basis to score more highly than trees that are rarely seen.



Section 8: Special factors (stand alone)

For a tree to be scheduled or Notable it needs to meet only one of these special factors

Heritage

Is associated with or commemorates an historic event (including Maori history or legend)

Has strong public associations or has an historic association with a well known historic or notable figure

Is strongly associated with a local historic feature and now forms a significant part of that feature

Scientific

Is the only example of the species in Auckland or the largest
known specimen of the species in Auckland (including height
and lateral spread) (only applies to individual trees)

Is a significant example of a species rare in Auckland or a native species that is nationally or regionally threatened (as assessed by DOC or on the regional threatened species list)

Has outstanding value because of its scientific significance

Ecosystem service

Provides critical habitat for a threatened native species population e.g., bats, chevron skinks, kiwi, yellow mistletoe etc

Cultural

Demonstrates a custom, way of life or process that was common but is now rare, is in danger of being lost or has been lost

Has an important role in defining the communal identity and distinctiveness of the community through having special symbolic, spiritual, commemorative, traditional or other cultural value or represents important aspects of collective memory, identity or remembrance, the meanings of which should not be forgotten

Is a landmark, or marker that the community identifies with

Intrinsic

Is intrinsically notable because of a combination of factors including the size, age, vigour and vitality, stature and form or visual contribution of the tree or group of trees



Comments

YES

NO

Section 6: Tree-specific factors (see following page for scoring)



A tree can be scheduled as Notable if it achieves a score of 20 or more

		ore	
Age and health Is notable because of its age (e.g., the oldest of its species in Auckland) and there is something about the vigour and vitality of the tree or group of trees which makes it notable given other factors (such as its age)		atory no	otes)
Character and form Is an exceptional example of the species in character and/or form (i.e., text book shape or has a particular relationship with its environment) or attributes that makes it unique			
Size It is an exceptional size for the species in the location (including height, girth or lateral spread)	is		
Visual contribution It makes a significant contribution to the visual character of an area or to the vista from elsewhere in Auckland			
Section 7: Negative effects			
Are there any matters that weigh agains protection at this location?	st the tree'	's long t	term
Hazard and negative effects	YES	NO	
Does the tree present negative impacts upo human health and / or property?	n		
Are these negative effects manageable through arboricultural or property management means?			
Is the tree species listed in the Regional Pess Management Strategy as a Total Control or Containment Plant or listed under the Biosecurity Act 1993 as an Unwanted Organism?	t		

Scoring of tree specific factors



Age and health

Vigour	High	3	5	6	8	10
and	▲	2	4	6	8	8
vitality		2	4	6	6	7
		2	4	4	5	5
	Low	2	2	2	3	3
	Age in Years	<40	41- 60	61- 80	81- 100	>100

Character or form

Not exceptional	0
Exceptional example locally	5
Exceptional example in Auckland	10

Size

Average size for the species in this location	0
Greater than average size (up to 25% larger)	5
Substantially greater than average size (>25% larger)	10

Visual contribution

In backyard or gully	2	e.g. fewer than 100 people see the tree daily
Local park/community/ beside minor road or feeder road/catchment	5	e.g. between 100 and 5000 people see the tree daily
Main Road/motorway or higly visible landform	10	e.g. more than 5000 people see the tree daily

This scoring system should be used when assessing the age and health of a tree. It allows for trees that are old and healthy to score much more highly than trees that are either unhealthy or young. The degree of vigour and vitality for any tree is assessed given the age of the tree. Therefore, a tree that is over 100 years old and showing high vigour and vitality, for a tree that age, will score a 10.

This scoring system should be used when assessing the character or form of a tree. It allows for trees that are exceptional examples at two spatial scales (from local to Auckland-wide) to score more highly than trees that are regarded as normal.

This scoring system should be used when assessing the size of a tree (including height, girth and lateral spread). It allows for trees that are larger than would be expected (on average) for a particular location to be scored more highly than trees that are at, or close to (or below), their average height.

This scoring system should be used when assessing the visual contribution of a tree. It allows for trees that are seen by more people on a daily basis to score more highly than trees that are rarely seen.



Section 8: Special factors (stand alone)

For a tree to be scheduled or Notable it needs to meet only one of these special factors

YES

NO

Comments

Heritage

Is associated with or commemorates an historic event (including Maori history or legend)

Has strong public associations or has an historic association with a well known historic or notable figure

Is strongly associated with a local historic feature and now forms a significant part of that feature

Scientific

Is the only example of the species in Auckland or the largest
known specimen of the species in Auckland (including height
and lateral spread) (only applies to individual trees)

Is a significant example of a species rare in Auckland or a native species that is nationally or regionally threatened (as assessed by DOC or on the regional threatened species list)

Has outstanding value because of its scientific significance

Ecosystem service

Provides critical habitat for a threatened native species population e.g., bats, chevron skinks, kiwi, yellow mistletoe etc

Cultural

Demonstrates a custom, way of life or process that was common but is now rare, is in danger of being lost or has been lost

Has an important role in defining the communal identity and distinctiveness of the community through having special symbolic, spiritual, commemorative, traditional or other cultural value or represents important aspects of collective memory, identity or remembrance, the meanings of which should not be forgotten

Is a landmark, or marker that the community identifies with

Intrinsic

Is intrinsically notable because of a combination of factors including the size, age, vigour and vitality, stature and form or visual contribution of the tree or group of trees



Section 6: Tree-specific factors (see following page for scoring)



A tree can be scheduled as Notable if it achieves a score of 20 or more

(-	Sco		Comments
Age and health Is notable because of its age (e.g., the oldest of its species in Auckland) and there is something about the vigour and vitality of the tree or group of trees which makes it notable given other factors (such as its age)		atory notes)	
Character and form Is an exceptional example of the species in character and/or form (i.e., text book shape or has a particular relationship with its environment) or attributes that makes it unique			
Size It is an exceptional size for the species in this location (including height, girth or lateral spread)	5		
Visual contribution It makes a significant contribution to the visual character of an area or to the vista from elsewhere in Auckland			
Section 7: Negative effects			
Are there any matters that weigh against protection at this location?	the tree'	s long term	
Hazard and negative effects	YES	NO	
Does the tree present negative impacts upon human health and / or property?			
Are these negative effects manageable through arboricultural or property management means?			
Is the tree species listed in the Regional Pest Management Strategy as a Total Control or Containment Plant or listed under the Biosecurity Act 1993 as an Unwanted Organism?			

Scoring of tree specific factors

These scoring systems are to be used when evaluating a tree against the tree-specific factors in Section 6 (see page 10).

Age and health

Vigour	High	3	5	6	8	10
and	▲	2	4	6	8	8
vitality		2	4	6	6	7
		2	4	4	5	5
	Low	2	2	2	3	3
	Age in Years	<40	41- 60	61- 80	81- 100	>100

Character or form

Not exceptional	0
Exceptional example locally	5
Exceptional example in Auckland	10

Size

Average size for the species in this location	0
Greater than average size (up to 25% larger)	5
Substantially greater than average size (>25% larger)	10

Visual contribution

In backyard or gully	2	e.g. fewer than 100 people see the tree daily
Local park/community/ beside minor road or feeder road/catchment	5	e.g. between 100 and 5000 people see the tree daily
Main Road/motorway or higly visible landform	10	e.g. more than 5000 people see the tree daily

This scoring system should be used when assessing the age and health of a tree. It allows for trees that are old and healthy to score much more highly than trees that are either unhealthy or young. The degree of vigour and vitality for any tree is assessed given the age of the tree. Therefore, a tree that is over 100 years old and showing high vigour and vitality, for a tree that age, will score a 10.

This scoring system should be used when assessing the character or form of a tree. It allows for trees that are exceptional examples at two spatial scales (from local to Auckland-wide) to score more highly than trees that are regarded as normal.

This scoring system should be used when assessing the size of a tree (including height, girth and lateral spread). It allows for trees that are larger than would be expected (on average) for a particular location to be scored more highly than trees that are at, or close to (or below), their average height.

This scoring system should be used when assessing the visual contribution of a tree. It allows for trees that are seen by more people on a daily basis to score more highly than trees that are rarely seen.



Section 8: Special factors (stand alone)

For a tree to be scheduled or Notable it needs to meet only

Heritage

Is associated (including №

Has strong p with a well

Is strongly a forms a sign

Scientific

Is the only example of the species in Auckland or the largest
known specimen of the species in Auckland (including height
and lateral spread) (only applies to individual trees)

Is a significa native speci assessed by

Has outstan

Ecosystem

Provides crit population e

Cultural

Demonstrat common bu lost

Has an impo and distinct symbolic, sp cultural valu memory, ide should not l

Is a landmar

Intrinsic

Is intrinsical including the visual contribution of the tree or group of trees

one of these special factors	YES	NO	Comments
d with or commemorates an historic event 1aori history or legend)			
public associations or has an historic association known historic or notable figure			
ssociated with a local historic feature and now ificant part of that feature			
example of the species in Auckland or the largest imen of the species in Auckland (including height spread) (only applies to individual trees)			
nt example of a species rare in Auckland or a es that is nationally or regionally threatened (as DOC or on the regional threatened species list)			
ding value because of its scientific significance			
a service			
cical habitat for a threatened native species e.g., bats, chevron skinks, kiwi, yellow mistletoe etc			
es a custom, way of life or process that was t is now rare, is in danger of being lost or has been			
ortant role in defining the communal identity iveness of the community through having special piritual, commemorative, traditional or other le or represents important aspects of collective entity or remembrance, the meanings of which			
be forgotten			
k, or marker that the community identifies with			
ly notable because of a combination of factors e size, age, vigour and vitality, stature and form or			

Tree 4

Section 6: Tree-specific factors (see following page for scoring)



A tree can be scheduled as Notable if it achieves a score of 20 or more

,	Sco		Comments
(se Age and health Is notable because of its age (e.g., the oldest of its species in Auckland) and there is something about the vigour and vitality of the tree or group of trees which makes it notable given other factors (such as its age)	ee explana	atory notes)	
Character and form Is an exceptional example of the species in character and/or form (i.e., text book shape or has a particular relationship with its environment) or attributes that makes it unique			
Size It is an exceptional size for the species in this location (including height, girth or lateral spread)			
Visual contribution It makes a significant contribution to the visual character of an area or to the vista from elsewhere in Auckland			
Section 7: Negative effects			
Are there any matters that weigh against protection at this location?	the tree's	s long term	
Hazard and negative effects	YES	NO	
Does the tree present negative impacts upon human health and / or property?			
Are these negative effects manageable through arboricultural or property management means?			
Is the tree species listed in the Regional Pest Management Strategy as a Total Control or Containment Plant or listed under the Biosecurity Act 1993 as an Unwanted Organism?			

Scoring of tree specific factors



Age and health

Vigour	High	3	5	6	8	10
and	▲	2	4	6	8	8
vitality		2	4	6	6	7
		2	4	4	5	5
	Low	2	2	2	3	3
	Age in Years	<40	41- 60	61- 80	81- 100	>100

Character or form

Not exceptional	0
Exceptional example locally	5
Exceptional example in Auckland	10

Size

Average size for the species in this location	0
Greater than average size (up to 25% larger)	5
Substantially greater than average size (>25% larger)	10

Visual contribution

In backyard or gully	2	e.g. fewer than 100 people see the tree daily
Local park/community/ beside minor road or feeder road/catchment	5	e.g. between 100 and 5000 people see the tree daily
Main Road/motorway or higly visible landform	10	e.g. more than 5000 people see the tree daily

This scoring system should be used when assessing the age and health of a tree. It allows for trees that are old and healthy to score much more highly than trees that are either unhealthy or young. The degree of vigour and vitality for any tree is assessed given the age of the tree. Therefore, a tree that is over 100 years old and showing high vigour and vitality, for a tree that age, will score a 10.

This scoring system should be used when assessing the character or form of a tree. It allows for trees that are exceptional examples at two spatial scales (from local to Auckland-wide) to score more highly than trees that are regarded as normal.

This scoring system should be used when assessing the size of a tree (including height, girth and lateral spread). It allows for trees that are larger than would be expected (on average) for a particular location to be scored more highly than trees that are at, or close to (or below), their average height.

This scoring system should be used when assessing the visual contribution of a tree. It allows for trees that are seen by more people on a daily basis to score more highly than trees that are rarely seen.



Section 8: Special factors (stand alone)

For a tree to be scheduled or Notable it needs to meet only one

Heritage

Is associated wit (including Maor

Has strong publi with a well know

Is strongly assoc forms a significa

Scientific

Is the only example of the species in Auckland or the largest
known specimen of the species in Auckland (including height
and lateral spread) (only applies to individual trees)

Is a significant e native species th assessed by DO

Has outstanding

Ecosystem sei

Provides critical population e.g.,

Cultural

Demonstrates a common but is lost

Has an importar and distinctiven symbolic, spiritu cultural value or memory, identit should not be fo

Is a landmark, o

Intrinsic

Is intrinsically no including the siz visual contribution of the tree or group of trees

of these special factors	YES	NO	Comments
th or commemorates an historic event i history or legend)			
ic associations or has an historic association vn historic or notable figure			
ciated with a local historic feature and now ant part of that feature			
nple of the species in Auckland or the largest n of the species in Auckland (including height ad) (only applies to individual trees)			
example of a species rare in Auckland or a nat is nationally or regionally threatened (as C or on the regional threatened species list)			
g value because of its scientific significance			
rvice			
habitat for a threatened native species bats, chevron skinks, kiwi, yellow mistletoe etc			
custom, way of life or process that was now rare, is in danger of being lost or has been			
nt role in defining the communal identity ess of the community through having special al, commemorative, traditional or other represents important aspects of collective ay or remembrance, the meanings of which orgotten			
r marker that the community identifies with			
otable because of a combination of factors e, age, vigour and vitality, stature and form or			



Section 6: Tree-specific factors (see following page for scoring)



A tree can be scheduled as Notable if it achieves a score of 20 or more

(Sco		Comments
Age and health Is notable because of its age (e.g., the oldest of its species in Auckland) and there is something about the vigour and vitality of the tree or group of trees which makes it notable given other factors (such as its age)		atory notes)	
Character and form Is an exceptional example of the species in character and/or form (i.e., text book shape or has a particular relationship with its environment) or attributes that makes it unique			
Size It is an exceptional size for the species in thi location (including height, girth or lateral spread)	S		
Visual contribution It makes a significant contribution to the visual character of an area or to the vista from elsewhere in Auckland			
Section 7: Negative effects			
Are there any matters that weigh against protection at this location?	t the tree'	s long term	
Hazard and negative effects	YES	NO	
Does the tree present negative impacts upor human health and / or property?			
Are these negative effects manageable through arboricultural or property management means?			
Is the tree species listed in the Regional Pest Management Strategy as a Total Control or Containment Plant or listed under the Biosecurity Act 1993 as an Unwanted Organism?			

Scoring of tree specific factors



These scoring systems are to be used when evaluating a tree against the tree-specific factors in Section 6 (see page 10).

Age and health

Vigour	High	3	5	6	8	10
and	▲	2	4	6	8	8
vitality		2	4	6	6	7
		2	4	4	5	5
	Low	2	2	2	3	3
	Age in Years	<40	41- 60	61- 80	81- 100	>100

Character or form

Not exceptional	0
Exceptional example locally	5
Exceptional example in Auckland	10

Size

Average size for the species in this location	0
Greater than average size (up to 25% larger)	5
Substantially greater than average size (>25% larger)	10

Visual contribution

In backyard or gully	2	e.g. fewer than 100 people see the tree daily
Local park/community/ beside minor road or feeder road/catchment	5	e.g. between 100 and 5000 people see the tree daily
Main Road/motorway or higly visible landform	10	e.g. more than 5000 people see the tree daily

This scoring system should be used when assessing the age and health of a tree. It allows for trees that are old and healthy to score much more highly than trees that are either unhealthy or young. The degree of vigour and vitality for any tree is assessed given the age of the tree. Therefore, a tree that is over 100 years old and showing high vigour and vitality, for a tree that age, will score a 10.

This scoring system should be used when assessing the character or form of a tree. It allows for trees that are exceptional examples at two spatial scales (from local to Auckland-wide) to score more highly than trees that are regarded as normal.

This scoring system should be used when assessing the size of a tree (including height, girth and lateral spread). It allows for trees that are larger than would be expected (on average) for a particular location to be scored more highly than trees that are at, or close to (or below), their average height.

This scoring system should be used when assessing the visual contribution of a tree. It allows for trees that are seen by more people on a daily basis to score more highly than trees that are rarely seen.

Section 8: Special factors (stand alone)

For a tree to be scheduled or Notable it needs to meet only one of these special factors

YES

NO

Comments

Heritage

Is associated with or commemorates an historic event (including Maori history or legend)

Has strong public associations or has an historic association with a well known historic or notable figure

Is strongly associated with a local historic feature and now forms a significant part of that feature

Scientific

Is the only example of the species in Auckland or the largest
known specimen of the species in Auckland (including height
and lateral spread) (only applies to individual trees)

Is a significant example of a species rare in Auckland or a native species that is nationally or regionally threatened (as assessed by DOC or on the regional threatened species list)

Has outstanding value because of its scientific significance

Ecosystem service

Provides critical habitat for a threatened native species population e.g., bats, chevron skinks, kiwi, yellow mistletoe etc

Cultural

Demonstrates a custom, way of life or process that was common but is now rare, is in danger of being lost or has been lost

Has an important role in defining the communal identity and distinctiveness of the community through having special symbolic, spiritual, commemorative, traditional or other cultural value or represents important aspects of collective memory, identity or remembrance, the meanings of which should not be forgotten

Is a landmark, or marker that the community identifies with

Intrinsic

Is intrinsically notable because of a combination of factors including the size, age, vigour and vitality, stature and form or visual contribution of the tree or group of trees

