Henderson-Massey Urban Ngahere

Action Plan

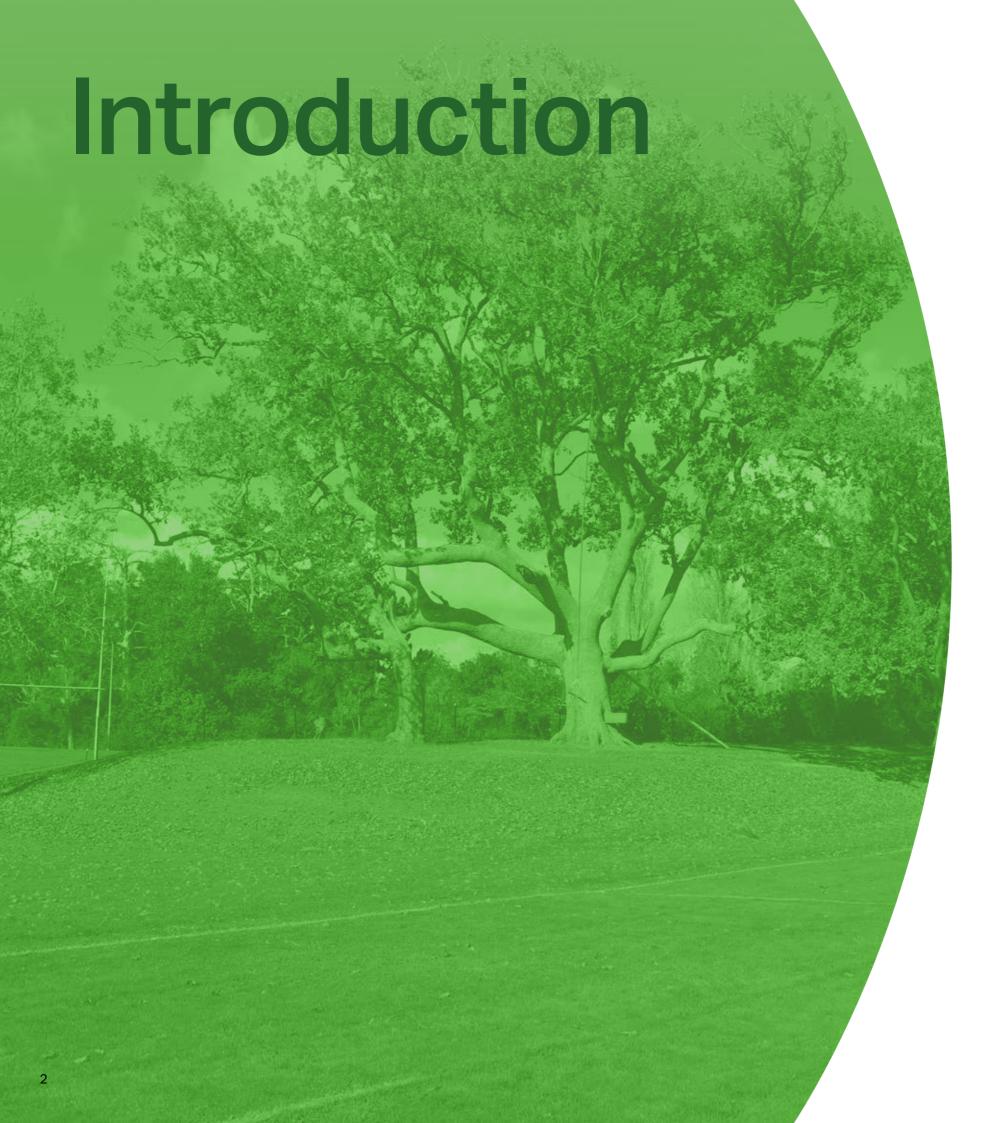
September 2020





Contents

- 2 Introduction
- 10 The Whats, The Whys & The Whens
- 12 Tree Planting Principles
- 16 Partners
- 18 Goals
- 20 Objectives
- 24 Action Plans
- 30 References
- 32 Appendices



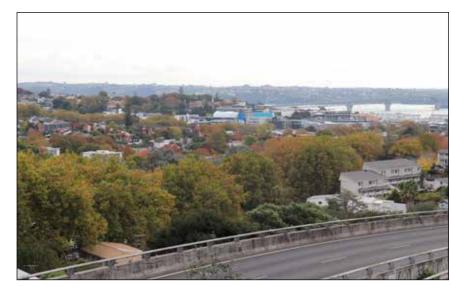


Image 1: View of the local board area

The Henderson-Massey Urban Ngahere Action Plan is a positive step towards seeking to recognise and replenish Auckland's urban forest. It is the result of determined advocacy of the Henderson-Massey Local Board, community groups and stakeholders.

We are proud to produce a localised urban ngahere action plan which is intended to deliver on Auckland Council's *Urban Ngahere* (Forest) Strategy¹. As a Board, we are also committed to enhancing the urban forest and biodiversity within our local board area.

We have developed the Henderson-Massey Local Board Ngahere Action Plan to connect our parks and open spaces. We will also continue to explore planting opportunities through these corridors to increase biodiversity and will seek to encourage important community initiatives; such as native urban forest regeneration, pollinator paths and the planting of fruiting species.

The Henderson-Massey Local Board supported the development of a canopy analysis report to address the pressures on the urban forest and loss of tree cover, and to meet the targets set in *Auckland's Urban Ngahere Strategy*¹.

This strategy has a stated target to increase Auckland's tree canopy cover from a regional estimate of 18% (as assessed in 2013) to 30% by 2050. In addition, the strategy also states an aim of having at least 15% tree canopy cover in every local board area within this timeframe. Given the above, it is clear that a coordinated approach to achieving the targets for both local board areas and region-wide is necessary.

With the extent of the urban forest in the Henderson-Massey Local Board area having now been assessed, we understand the need for a large number of planting projects to be committed to in the short and medium term as this will ensure that a flourishing urban forest can continue to develop into the future. Extensive national and international urban forest studies are in unison when extolling the benefits that the "lungs of a city" can bring to its inhabitants.

Introduction continued

There are numerous benefits associated with having, developing and maintaining a flourishing urban forest.

The Auckland's Urban Forest Canopy
Cover: State and Change (2013 –
2016/2018) report states that the
Henderson-Massey Local Board area
has 15% canopy cover²; this is the
desired minimum local board target
detailed in Auckland's Urban Ngahere
(Forest) Strategy¹ – please refer to the
'Henderson-Massey Local Board – Urban
Tree Map' LiDAR map in the appendices
of this report and Map 1 below.

With a significant percentage of the local board area's 'suburban' urban forest assessed as growing on private land (which is subject to little, if any, tree protection legislation, by-laws or policies), it is reasonable to assume that, since the data was last captured and with no coordinated tree planting plan in place, urban forest canopy coverage within the

Henderson-Massey Local Board area will have declined.

Given the array of influences that can impact on our local natural environment, commitment to a well-considered tree planting action plan is required. For the betterment of our collective urban forest, the local board is pleased to make such a commitment.

A coordinated action plan, along with an effective long-term maintenance regime and well considered tree protection legislation, by-laws or policies will go a long way towards protecting, enhancing and maintaining a vibrant and essential urban forest within the Henderson-Massey Local Board area.

Henderson-Massey Local Board



Map 1: Canopy cover percentage by suburb (based on 2013 LiDAR)



Ngā painga o te ngahere ā-tāone o Tāmaki Makaurau Benefits of Auckland's urban ngahere



Improve health and wellbeing



Social

Reduce the urban heat island effect



Provide shade



Enhance visual amenity





Increase property values



Reduce flood risk



Reduce energy costs



Reduce healthcare costs



Enhance biodiversity



Improve air quality



Carbon sequestration



Improve water quality



Support education



Local food growing



Sustain and enhance mauri



Cultural heritage Cultural

Economic

Urban Forest Strategy

Objectives



Growing

Auckland needs to grow its urban ngahere to increase and amplify the benefits trees provide, along with addressing distributional inequity. By expanding and enriching its urban ngahere, Auckland will maximise the social, environmental, economic and cultural benefits that trees, shrubs and other vegetation bring to an urban environment.



Protecting

Protecting existing urban ngahere is crucial to safeguarding the added values and benefits larger mature trees provide. Caring for saplings is critical for ensuring older trees are replenished before the end of their life, ensures our urban ngahere grows over time and publicly-funded planting is successful.

Mechanisms



Engage

Engage with partners and stakeholders – with mana whenua, residents, private landowners, community organisations, network utility operators and the private sector to ensure the urban ngahere is well managed, its benefits are well recognised and that growing and protecting the urban ngahere on public and private land is widely supported.



Manage

Manage the city's urban ngahere on public land through coordinated planning, strategic planting and smart, innovative urban design while facilitating best practice standards for work on and around trees through vegetation maintenance contracts.





What is an urban ngahere action plan?

Why is an urban ngahere action plan needed?

When does an urban ngahere action plan get implemented?

This section provides details and answers to the 'whats', the 'whys' and the 'whens' of an effective urban ngahere action plan.

The What

This urban ngahere action plan:

- Is a road map that spells out what steps are required in order to achieve the stated goals of the Henderson-Massey Local Board as they relate to the urban forest within the local board area boundaries.
- Details objectives and actions that support the Henderson-Massey Local Board's urban forest protection, development and maintenance goals.

The Why

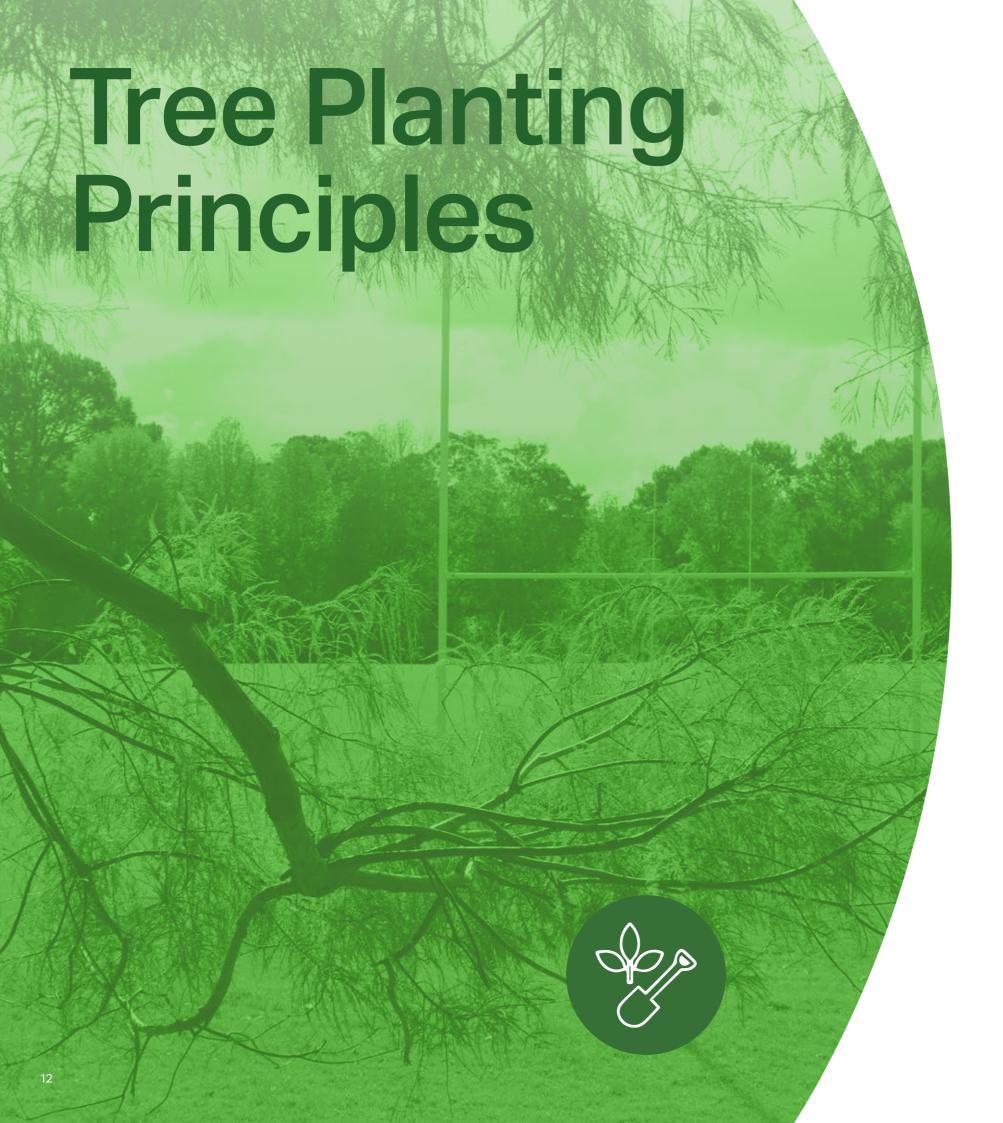
This urban ngahere action plan:

- Is needed as currently there is no coherent tree planting plan to support the promotion, protection and enhancement of the urban forest within the boundaries of the local board area.
- Is required as a recent high level assessment has identified tree canopy cover loss throughout the local board area.
- Is necessary as a high level assessment of the current tree stock within the local board boundaries revealed vulnerabilities in the age spread, condition, species range and longevity of the existing tree canopy cover.

The When

This urban ngahere action plan:

- Outlines the requirements necessary to undertake to develop a ten year tree planting plan.
- Provides timeframes per key actions that support the goals and objectives of the Henderson-Massey Urban Ngahere Action Plan.



With a portion of the local board area being coastline, the presence of the motorway, and the suburbs containing intensive residential lots; a range of planting principles are required in order to establish new plantings that contribute long term to the board's overall urban forest canopy cover.

Examples of relevant tree planting principles are: planting the right tree in the right place; having a preference for native species; ensuring urban forest diversity; creating ecological corridors and connections; and seeking to manage the whole lifecycle of urban trees.

Tree planting principles are to be developed in a manner that address a range of issues (some being specific to the Henderson-Massey Local Board area) such as:

- Salt tolerance
- Soil type
- Structural form
- Plant large where we can
- Heritage context
- Climate change species susceptibility/effects resilience
- Availability of space above and below ground
- Shading
- Leaf drop
- Future sight and view lines
- Visual amenity
- · Infrastructure conflict
- Private property planting opportunities/assistance
- Pest and disease resistance
- Maintenance requirements
- Increasing biodiversity
- Bird and wildlife corridor creation/ enhancement/linkages
- Have a well-proportioned mix of saplings, semi mature and mature trees across the area
- A species composition of 70% native species and 30% exotic species. The exotic species breakdown is as follows; 10% fruit-producing species, 10% species with functional uses (i.e. carbon sequesters, ecosystem services) and 10% exotic species with cultural significance.

When addressing species selection, the tree planting principles are to be supported by the Auckland Council *Indigenous Terrestrial and Wetland Ecosystems of Auckland* (published 2017) report³. This document identifies species that are part of the various terrestrial and wetland ecosystems (and their variants) that have been located through Auckland boundaries.

In addition, it is important to consider the extension, and/or creation of pollinator paths to help create corridors for birds, and insects to move along. Selecting tree varieties that provide flower sources for birds and insects are important to help build pathways for movement and to build the extent of habitat to support increased biodiversity at a local street and park scale.

Consideration is to be given to large trees that provide a diverse food source and habitat for native birds, as well as the maintenance of tall tree stumps that could provide nesting opportunities for birds.

Where appropriate, adopting the strategic principle of 'native first' when seeking to plant with appropriate species in ecologically relevant locations will assist in the enhancement of biological diversity, as well as aiding in ecological restoration.

Tree Planting Principles continued



In addition, consideration relating to the effectiveness of individual species to remove carbon dioxide from the atmosphere and store it as carbon as part of their overall biomass over their lifetime is considered to be an important tree planting principle.

Planting platforms and opportunities can be found in the body of this report, for example:

- High level 'Suburb By Suburb Planting Opportunities'
- Survey Map; SEA and urban forest cover (based on the 2013 LiDAR)

When it comes to identifying planting locations and options, there are a wide range of opportunities to consider:

- Auckland Council sports fields, parks and reserves (i.e. Parrs Park; a large expanse of land with some tall trees and a watercourse)
- Auckland Transport land (i.e. Barry Curtis Park; a large area consisting of open spaces, pathways and wetlands)
- Public cemeteries (note that some countries are now using trees as 'headstones')
- Government land (i.e. schools, hospitals, fallow sites)
- NZTA land

- Large planters along cycle lanes
- Future open space programmes and projects
- Green walls (i.e. amenity plantings that can be installed in planters/on fencing/on wires attached to sides of public/ commercial buildings)

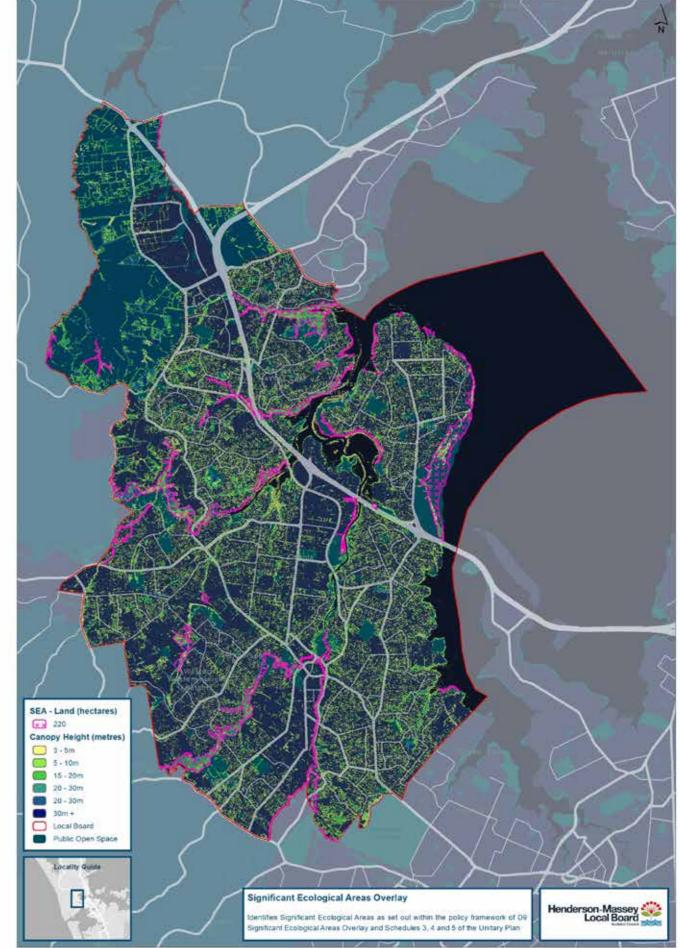
Where possible, consideration of planting large grade specimens helps ensure we get 'larger trees faster' so as to give rise to the urban forest benefits sooner.

Planting with a variety of species is particularly important when addressing resilience issues such as pest and disease, and climate change species vulnerabilities; a small species range could get decimated by a pest and/or disease infestation (i.e. Dutch Elm Disease and Kauri Dieback), just as a cooler, dryer climate-loving species may well suffer in the predicted warmer and more moist seasons that Auckland is likely to face in the future.

We will work with the community, Auckland Council, Ministry for Primary Industries and iwi to isolate incidents, prevent further spread of pest trees, educate and plant a diversity of tree species that are resilient to current disease to ensure the survival of our urban forest. Of equal importance is ensuring that we address 'Seed to Succession' issues, with a focus on 'end of useful life' timing (as Kew Gardens in the UK found out in the 1987 storm, when they lost a large number of over-mature specimens and did not have sufficient middle age trees to carry them through), as well as providing bird and wildlife corridor creation and enhancement, along with linking Significant Ecological Areas (SEAs).

It is the combination of the above points that will ensure that, by introducing and maintaining a wide range of tree species, sizes and ages, a future healthy, vibrant and benefit-producing urban forest will be present for many years to come.

As stated in *Auckland's Urban Ngahere (Forest) Strategy*¹ –
'Together, growing Auckland's urban
ngahere for a flourishing future.'



Map 2: SEA and urban forest cover (based on 2013 LiDAR)



The results of this urban ngahere action plan will benefit not only the residents of the Henderson-Massey Local Board area but also the wider city community as a whole. Given this fact and the very relatable nature of planting a tree, creation of a viable and sustainable network of partners who can provide support in a myriad of ways is deemed important; so much so that it is listed as one of the goals of this plan.

Examples of those entities who could partner in the deliverables of this plan are:

- MPHS Community Trust
- Massey Matters
- Ranui Community Centre

FOR BOARD DISCUSSION

- Other community volunteer groups
- Local school/community groups to operate eco-sourced nurseries
- Private land owners (possible for Auckland Council to fund the planting of trees on private properties)
- Commercial land owners (possible to install climbing green walls on/up sides of privately-owned buildings where trees can't be established)
- Auckland Council's Community
 Facilities department (by engaging with and supporting the renewals programme, create new planting locations by undertaking the removal of noxious trees/plants)
- Auckland Transport (engage with the maintenance programme i.e. retire hard stands to create new planting spaces)

- Healthy Waters (engage with the revegetation program, assist in the creation of educational rain gardens)
- Network Utility Operators (engage regarding planting location restrictions around network assets, support Vector's Overhead Improvement Program)
- Work with Panuku and Auckland Regional Facilities to develop and incorporate new planting opportunities within their new development and facility maintenance projects
- National environmental entities (Forest and Bird, Project Crimson, Trees That Count)
- Nursery Association (gain support by way of quality production donation/ price reduction)
- Government departments

 (opportunity to plant large trees
 for shading benefits in schools and
 hospitals, support from Department of
 Corrections to grow seedlings)
- NZTA (discuss species used in motorway plantings and their future long term protection and explore planting opportunities on surplus land)



Knowing, Growing, Protecting.

The goals of the Henderson-Massey Local Board in relation to the assessment, protection, management and development of the urban forest within the Henderson-Massey Local Board area are as follows:

- To create sustainable urban forest within the Henderson-Massey Local Board area that meets the needs of our community and surroundings
- To achieve 3-4% increase of tree canopy cover within the Henderson-Massey Local Board area boundaries by 2030
- To achieve 30% increase of tree canopy cover within the Henderson-Massey Local Board area boundaries by 2050

- To further enhance and amplify efforts to establish corridors of vegetation to link small and large open space areas
- To increase public awareness around the need to promote, protect and enhance the urban forest within the Henderson-Massey Local Board area
- To create a network of partners to support the development and maintenance of the urban forest within the Henderson-Massey Local Board area

FOR BOARD DISCUSSION



Knowing, Growing, Protecting.

In order to achieve the Henderson-Massey Local Board's goals in relation to the assessment, protection, management and development of the urban forest within the Henderson-Massey Local Board area, the following objectives are required to be undertaken:

- Research and compile a list of planting opportunities within the road reserve, parks and reserves, and commercial environments within the Henderson-Massey Local Board area
- Develop a suitable species list of small, medium and large trees to be used in the identified list of planting opportunities
- Develop a urban forest tree planting promotional program that engages stakeholders and partners
- Review and set up an accurate tracking system of Auckland Council's tree planting and maintenance practices
- Auckland Council Call Centre can be contacted on 09 301 0101 or via the council website www.aucklandcouncil.govt.nz. They can log maintenance requests to attend to newly planted trees, to review a site for a replacement tree planting, and to request that a new tree is planted
- Develop a 10 Year Tree Planting Plan (supported by a suitable funding framework)
- Engage with tree nursery suppliers and develop a nursery 'Growing Plan' that will service the 10 Year Tree Planting Plan

- Provide a report to the local board that outlines the financial requirements to support the funding commitments of the 10 Year Tree Planting Plan
- Continue discussions with
 Auckland Council regarding current
 levels of tree protection rules and
 their effectiveness as they relate to
 the protection and enhancement of
 the urban forest
- Council's Governing Body has commenced discussions with Central Government to highlight the need for change to the Resource Management Act to enable new or better rules to protect large trees of importance in Auckland
- Work with Auckland Council and the Henderson-Massey Local Board to collaboratively explore the development of an advisory service for tree care to help provide advice to customers on tree care and maintenance. Promote the value of professional tree care and work with national organisation to develop advisory service



By implementing these objectives, and in line with the stated goals, this urban ngahere action plan intends to ensure that:

- We engage with all stakeholders, partners, schools & local community groups so as to seek support regarding the planting & maintenance of future urban forest plantings
- The right trees will be planted in the right places
- The tree supply and planting works will be cost effective
- We arrange annual tree planting events
- We explore the options for setting up a tree fund to help with maintenance of large notable trees in the local board area





Introduction

Tree planting 'Action Plans' will be developed in order to deliver on the planting aspirations of the Henderson-Massey Local Board. This will involve site-specific assessments and consultation with regard to planting opportunities that exist within the board's boundaries. New tree planting will assist with the local board's efforts on adaptation and mitigation measures to help respond to climate change by positively leveraging efforts to "become a low carbon community" and implement the Action Plan.

To undertake the required activities that support the delivery of the Action Plans, the following matters will be considered and implemented:

Action

- Undertake a detailed assessment of planting opportunities within the road reserves, parks and reserves, and commercial environments in order to continue the greening of the Henderson-Massey Local Board area
- In accordance with the principles outlined in Auckland's Urban Ngahere (Forest) Strategy¹, research and compile a 'suitable species list' and 'tree planting principles' that will apply to all identified planting opportunities
- Develop a detailed 'Planting Opportunities List' that will help to deliver the goal of providing 30% of tree canopy cover within the Henderson-Massey Local Board area by 2050
- Develop a 1 3, a 4 6 and a 7 10 Year Funding Framework to deliver on the 'Planting Opportunities List'
- Record metrics that reflect estimated tree canopy cover percentage increase across the local board area post completion of all identified planting opportunities, as well as the estimated growth of existing trees up to 2050

Action Plans continued

Education

- Research, engage and enrol tree nursery suppliers regarding tree stock production standards, current stock availability and species selection for future plantings
- Undertake an assessment regarding the necessity for effective tree protection to support the long term protection, management and development of the urban forest
- Develop a promotional program that engages with identified stakeholders, partners and the wider public

Planting

- Compile indicative tree supply and planting pricing (that includes 3
 years post-planting maintenance, metrics assessments and reporting)
 to deliver on the 'Planting Opportunities List'
- Consider planting opportunities that include tree species that provide flowers, nectar and fruit to help support biodiversity
- Discuss and confirm best practice tree planting and ongoing maintenance methods with Auckland Council's Community Facilities department

Community Support

- Confirm with the Henderson-Massey Local Board a funding commitment for the 10 Year Tree Planting Plan and the 10 Year Funding Framework
- Immediately post adoption of the Action Plan, implement Year 1 of the 10 Year Tree Planting Plan
- Encourage and support volunteers in the community to be enabled to support the growth of the urban forest, working with contractors and local volunteer groups to deliver outcomes, e.g. through community grants
- Investigate opportunity to establish an annual resident scheme which would allow residents to nominate heritage and notable trees in the local board area
- Investigate opportunity to establish a contestable fund that would support private property owners to maintain large heritage and notable trees in their private property, enhancing bio-diversity in the local board area
- Investigate opportunities to establish an initiative that would provide the local board with a platform to acknowledge individuals for their contributions to making reserves and private properties pest plant free



Action Plan Tree **Planting Flowchart**

Parks

Consult with stakeholders to establish an annual process to determine priority areas to investigate

Road Reserve

Consult with

stakeholders

Review tree canopy coverage to identify the areas to be field investigated for new tree planting

undertake field investigations to confirm where new tree planting feasible and responds to

In spring,

local needs

plan, consult Consult with park users, community groups and local residents to determine the types of trees they would like to see planted species for planting in winter

In mid summer, place order for specimen trees for winter planting program based on results from survey work and consultaton process

Undertake late nurseries to review planting stock to Engage specialist methodology

Audit work quality and confirm planting

Local board agrees to **fund Growing Programme**

Annual Growing Implementation & Assessment Programme

to establish an annual process to determine priority areas to investigate

Review tree canopy coverage the areas to be field investigated for new tree

to identify

planting

In spring, undertake field investigations to determine where new

tree planting is feasible and local needs

Establish possible street tree planting numbers. Review utility locations are possible. Letter drop residents to gauge support, meet residents, discuss options and species type

Develop planting plan, consult with local board members and internal Council stakeholders numbers and species for planting in winter program

Develop planting

program

In mid summer, place order for 35li <mark>ade</mark> specimen trees program based on results from stre survey work and consultation process

Enrichment Planting

Consult with stakeholders to establish an annual process to determine priority areas to investigate

In spring, undertake field investigations to determine where enrichment planting species diversity

In spring, undertake field investigations to determine where enrichment planting can be undertaken within the so as to increase species diversity

management plans, **Greenways plans** and ecological assessments. Review maps to create ecological corridor connections and biodiversity focus areas. Identify ecological districts and develop planting plans with details on tree types and sizes to be planted

Review parks

Develop planting plan consult with local board members and internal Council stakeholders.

Work with coordinators to arrange for

planting days

has taken place ir accordance with in the correct

> Undertake review of winter planting program and develop annual report to update local board on areas planted, tree numbers and species established

Complete ongoing annual reviews of the Growing Program to establish total species/numbers planted and determine success rate percentages . Provide progress reporting to local board on total plantings. Collate data to provide cumulative numerical/species type success rates

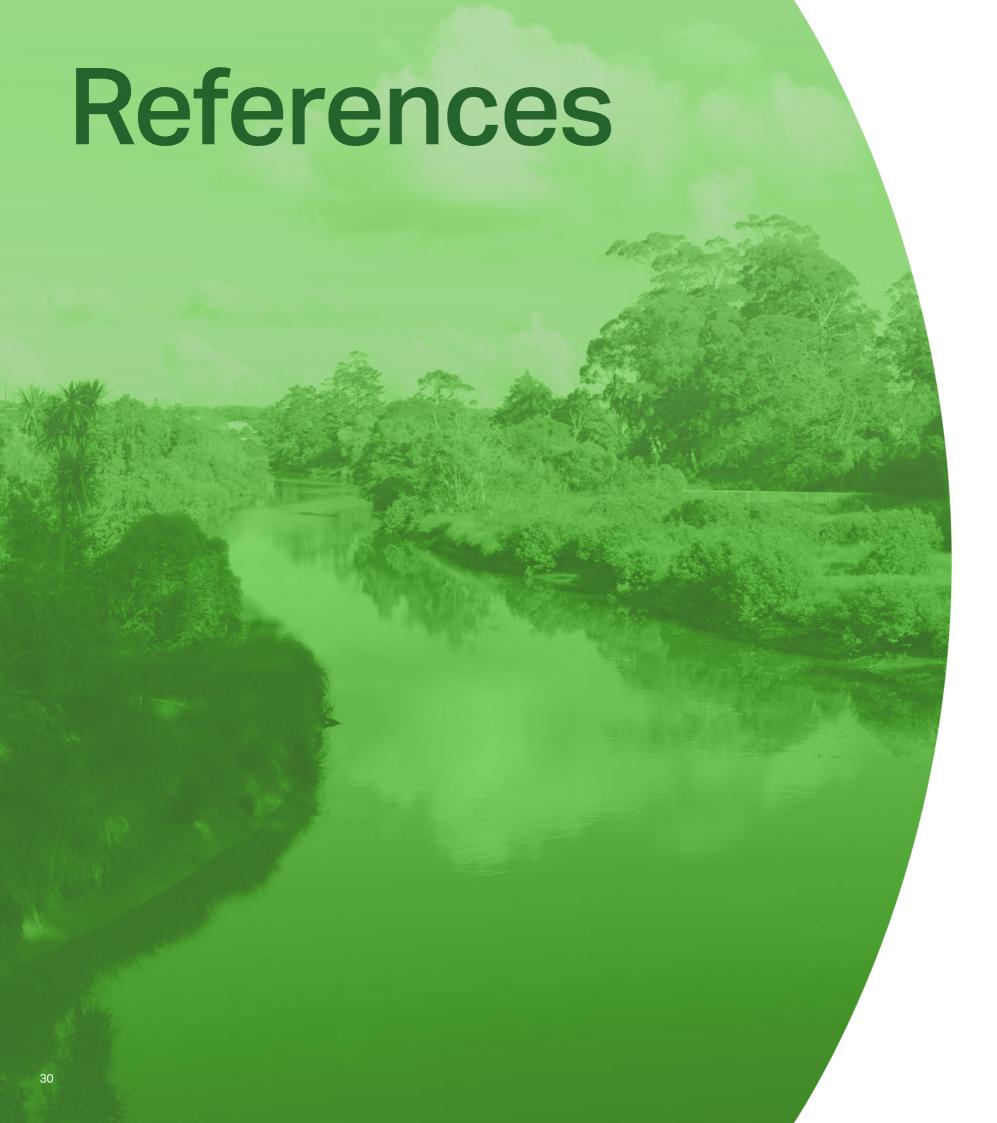




Image 2: Mixed exotic and native planting in Henderson Town Centre

- 1. Auckland Council Research and Evaluation Unit. (2019, March). Auckland's Urban Ngahere (Forest) Strategy. https://www.aucklandcouncil.govt.nz/plans-projects-policies-reports-bylaws/our-plans-strategies/topic-based-plansstrategies/environmental-plans-strategies/documents/urban-ngahere-forest-strategy.pdf
- 2. Golubiewski, N., Lawrence, G., Zhao, J., & Bishop, C. (2020). *Auckland's Urban Forest Canopy Cover: State and Change (2013-2016/2018).* https://www.knowledgeauckland.org.nz/publications/auckland-s-urban-forest-canopy-cover-state-and-change-2013-20162018/
- 3. Singers, N. J., Osborne, B., Lovegrove, T., Jamieson, A., Boow, J., Sawyer, J. W. D., & Webb, C. (2017). *Indigenous terrestrial and wetland ecosystems of Auckland*. Auckland Council, Te Kaunihera o Tāmaki Makaurau.

Auckland Council. (2017). *Henderson-Massey Local Board Plan 2017*. https://www.aucklandcouncil.govt.nz/about-auckland-council/how-auckland-council-works/local-boards/all-local-boards/Documents/henderson-massey-local-board-plan-2017.pdf

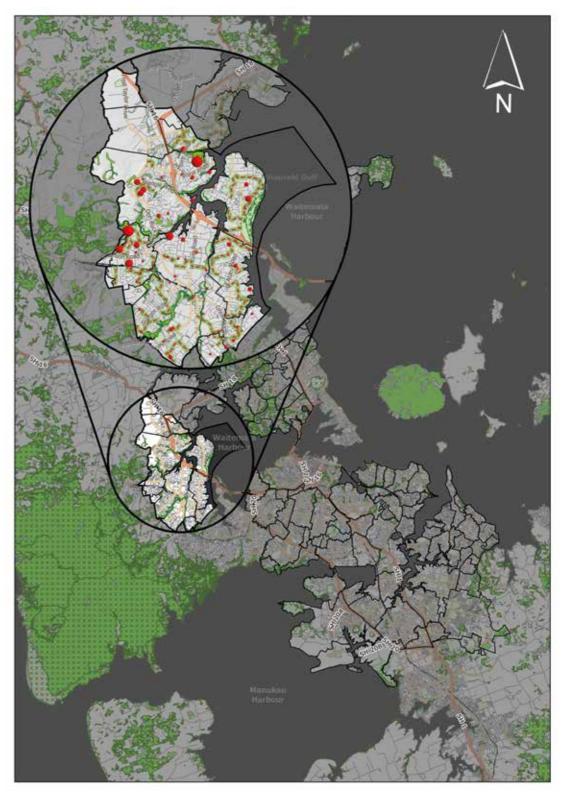
Auckland Council. (2019, August). *Henderson-Massey Connections Plan.* https://www.aucklandcouncil.govt.nz/about-auckland-council/how-auckland-council-works/local-boards/all-local-boards/henderson-massey-local-board/Documents/henderson-massey-connections-plan.pdf

Auckland Council. (2019). Local Development Initiative - Ngahere Work Programme. Year 1: Knowing Phase. Urban Ngahere (Forest) Analysis Report September 2019.

Wilcox, M. D. (2012). *Auckland's Remarkable Urban Forest*. Auckland Botanical Society.



Potential Tree Planting Opportunities



Map 3: Henderson-Massey Local Board area

Appendices continued

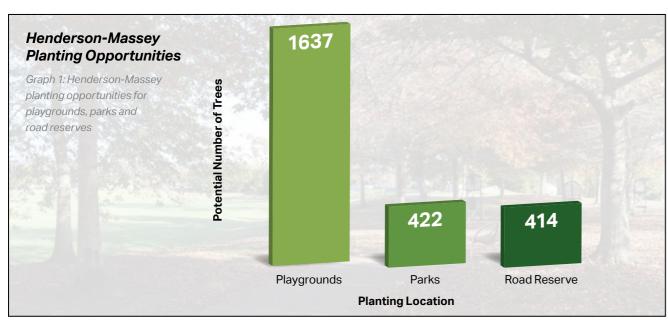
Surveying and Data Collection

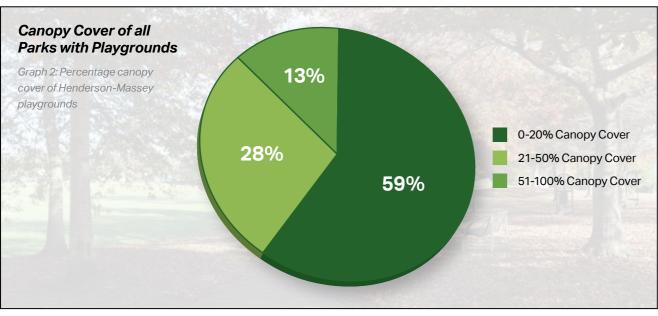
There are limitations with the data collected for potential planting opportunities. Upon review of the canopy analysis report², a high level assessment within the Henderson-Massey Local Board area was undertaken within the road reserve and within parks that have playgrounds; shade over these structures was the motivating factor regarding which parks were assessed for potential planting opportunities.

The private properties within the Henderson-Massey Local Board area have not been assessed. Berms measuring over 1 metre in width were assessed as

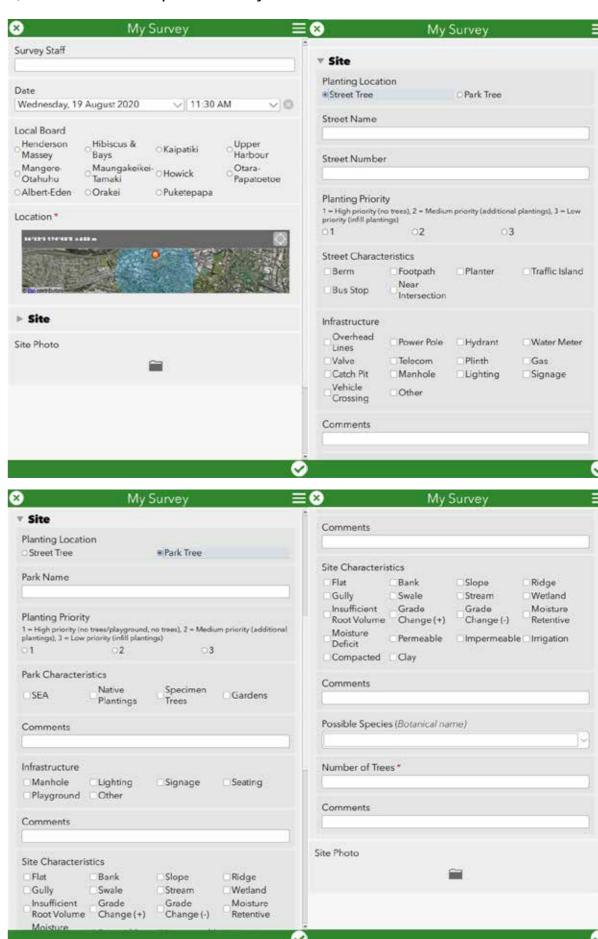
suitable for potential tree planting. The location of potential tree planting sites are an approximation only and further detailed site investigations are required.

As outlined in the Action Plan Tree Planting Flowchart, a further detailed investigation is required to be undertaken so as to confirm suitability of locations; taking into account a variety of issues, i.e. consultation with all relevant stakeholders, underground services, visual amenity issues, plant species selection, future growth, form and site suitability.

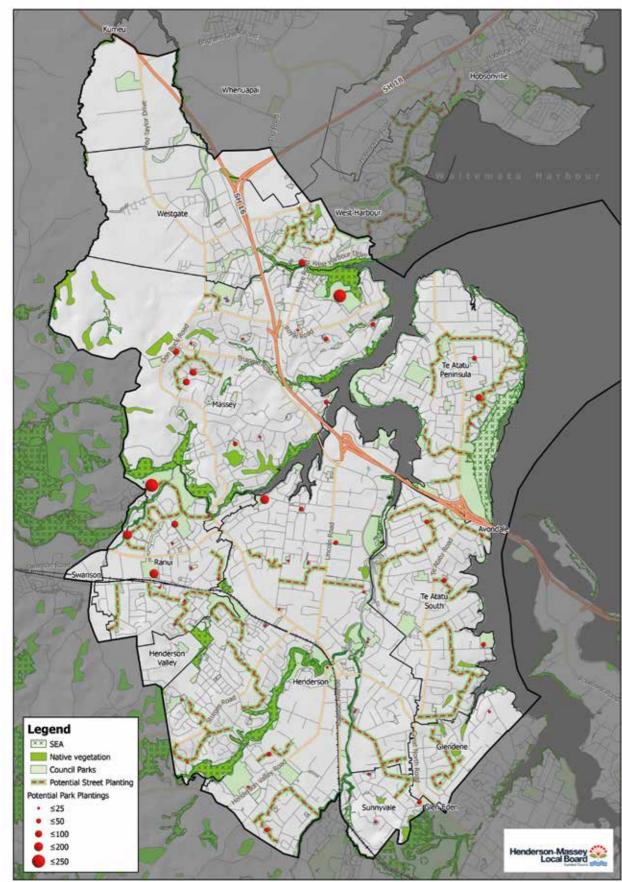




a) On-Site Data Capture Survey Form

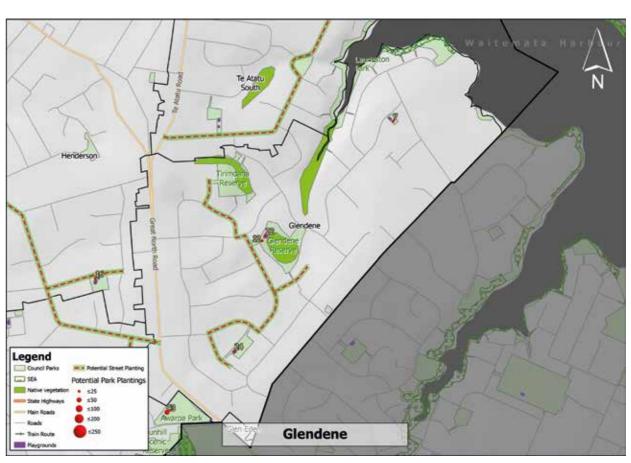


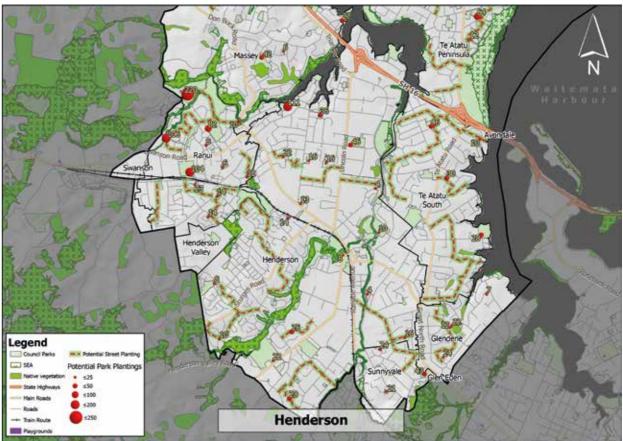
b) Henderson-Massey Tree Planting Opportunities Map



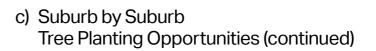
Map 4: Planting opportunity locations for the Henderson-Massey Local Board area

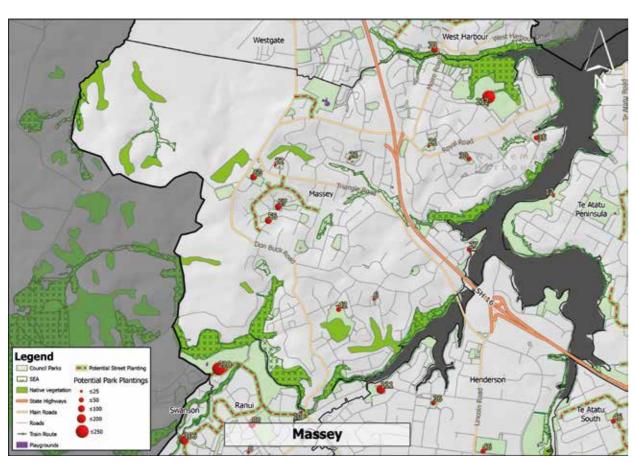
c) Suburb by Suburb Tree Planting Opportunities

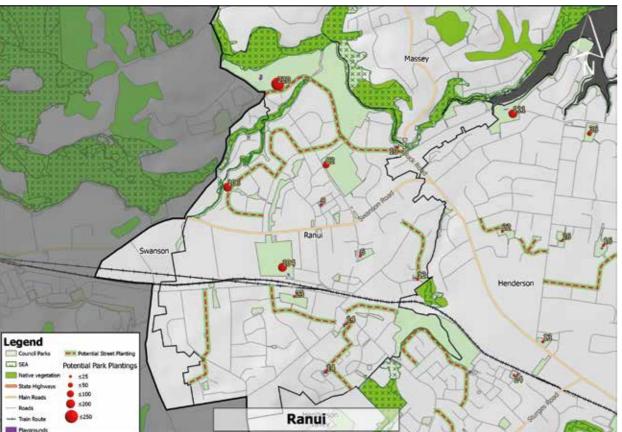


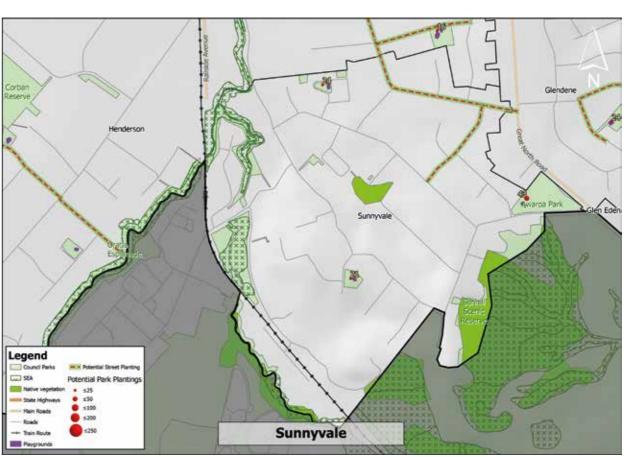


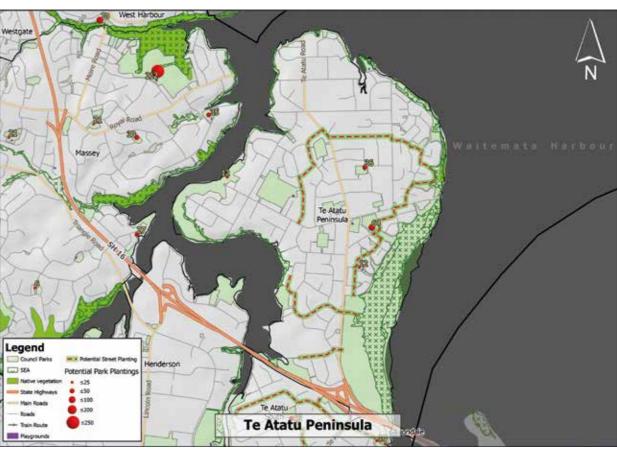
c) Suburb by Suburb Tree Planting Opportunities (continued)







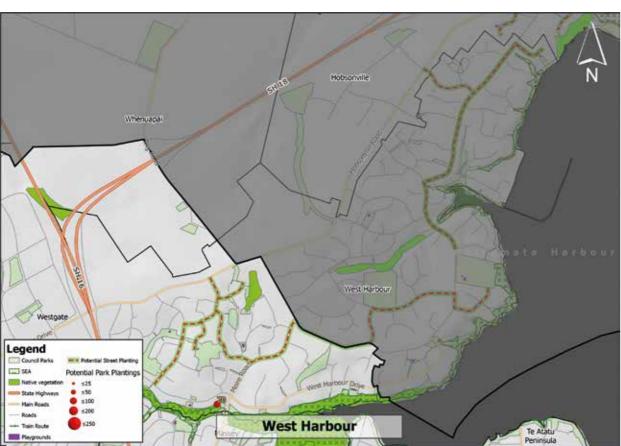




Appendices continued

c) Suburb by Suburb Tree Planting Opportunities (continued)







d) Henderson-Massey Park and Street Tree Planting Opportunities

The following tables detail the total number of planting opportunities within parks with playgrounds, along with possible planting sites within the road reserve.

In respect to recommended species to be planted within parks with playgrounds, this determination will occur when site-specific assessments are being undertaken. The tree species detailed in the 'Streets' table are a recommendation based on surrounding existing plantings.

Parks/Playgrounds Planting Opportunities

| Name | Plantings Around Playgrounds | Plantings Throughout Park |
|-------------------------|---------------------------------|------------------------------|
| Alan Reserve | 5 | 22 |
| Awaroa Park | 7 | 43 |
| Babich Reserve | 5 | 14 |
| Barrys Reserve | 7 | 7 |
| Blueridge Close | 8 | 24 |
| Bridge Avenue Reserve | 5 | 10 |
| Corran Reserve | 8 | 8 |
| Cron Reserve | 6 | 12 |
| Don Buck Corner | 6 | 10 |
| Durham Greeen | 6 | 36 |
| Emerald Valley Park | 7 | 57 |
| Epping Reserve | 4 | 4 |
| Fairdene Reserve | 8 | 16 |
| Featherstone Park | 5 | 13 |
| Ferngrove Park | 6 | 14 |
| Gallony Park | 6 | 56 |
| Glen Norman Reserve | 4 | 16 |
| Glendene Reserve | 10 | 22 |
| Hart Domain | 4 | 4 |
| Henderson Valley Park | 10 | 22 |
| Jack Pringle Skate Park | 14 | 64 |
| Kaikoura Reserve | 9 | 16 |
| Kemp Park | 6 | 21 |
| Kensington Gardens | 4 | 10 |
| Kingdale Reserve | 10 | 36 |
| Lockington Greeen | 3 | 14 |
| Lone tree Park | 6 | 12 |
| Lydford Greeen | 9 | 24 |
| Manutewhau Walk | 0 | 70 |
| Marelene Glade | 11 | 46 |

d) Henderson-Massey Park and Street Tree Planting Opportunities (continued)

Parks/Playgrounds Planting Opportunities continued

| Name | Plantings Around Playgrounds | Plantings Throughout Park |
|--------------------------------|---------------------------------|------------------------------|
| Marinich Reserve | 3 | 6 |
| Martin Jugum Reserve | 6 | 12 |
| Mcclintock Reserve | 5 | 22 |
| Mckinley Park | 7 | 21 |
| Mcleod Park | 6 | 28 |
| Morie Park | 12 | 212 |
| Murillo Reserve | 8 | 26 |
| Opanuku Reserve | 8 | 8 |
| Pooks Reserve | 3 | 23 |
| Ranui Domain | 4 | 104 |
| RiverPark Reserve | 11 | 111 |
| Royal heights Reserve | 6 | 21 |
| Sarajevo Reserve | 6 | 6 |
| Spargo Reserve | 5 | 35 |
| Starforth Reserve | 8 | 28 |
| Starling Park | 12 | 82 |
| Taipari Strand | 12 | 12 |
| Taitapu Park | 7 | 27 |
| Tatyana Park | 10 | 30 |
| Te Pai Park | 10 | 46 |
| Te Rangi Hiroa Birdwood Winery | 20 | 220 |
| Triangle Park | 14 | 60 |
| Tui Glen Reserve | 10 | 10 |
| Urlich Esplanade | 6 | 106 |
| Wakeling Park | 4 | 30 |
| Xena Park | 8 | 8 |
| Zita Maria Park | 12 | 42 |

Streets/Road Reserve Planting Opportunities

| Name | Tree Species | Potential Planting Opportunities |
|------------------|--------------------|-------------------------------------|
| Charlenne Close | Olea europaea | 11 |
| Ferngrove Avenue | Magnolia sp. | 3 |
| Milcoft Avenue | Sophora tetraptera | 10 |

Streets/Road Reserve Planting Opportunities continued

| Name | Tree Species | Potential Planting Opportunities |
|-----------------------|--------------------------------|-------------------------------------|
| Babich Road North | Alectryon excelsus | 10 |
| Jillian Drive | Sophora tetraptera | 19 |
| Ranui Avenue | Sophora microphylla | 11 |
| Mili Way | Alectryon excelsus | 12 |
| Wallace Road | Pittosporum eugenioides | 8 |
| Urliich Drive | Metrosideros excelsa | 12 |
| Arodella Crescent | Melia azedarach | 29 |
| Luanda Crescent | Sophora microphylla | 7 |
| Glen Road | Sophora microphylla | 12 |
| Ali Place | Pseudopanax crassifolius | 3 |
| Riserra Drive | Podocarpus totara | 1 |
| Tango Place | Sophora tetraptera | 15 |
| Splendour Close | Pseudopanax crassifolius | 5 |
| Welcome Place | Pseudopanax crassifolius | 9 |
| Maurice Borich Place | Pseudopanax crassifolius | 6 |
| Edward Avenue | Pittosporum tenuifolium | 21 |
| Fairdene Avenue | Kunzea robusta | 17 |
| Woodford Avenue | Metrosideros excelsa "Mistral" | 27 |
| Semillon Avenue | Fraxinus sp. | 7 |
| Hillwell Drive | Alectryon excelsus | 19 |
| Spence Road | Sophora microphylla | 43 |
| San Bernadino Drive | Metrosideros excelsa | 2 |
| San Marino Drive West | Pittosporum crassifolium | 7 |
| San Marino Drive | Metrosideros excelsa "Mistral" | 3 |
| Murilo Place | Kunzea robusta | 7 |
| Toledo Avenue | Ginkgo biloba | 5 |
| Coburg Street | Sophora tetraptera | 18 |
| Landow Place | Pittosporum eugenioides | 4 |
| Mile Place | Alectryon excelsus | 7 |
| Starforth Place | Alectryon excelsus | 5 |
| Andelko Place | Podocarpus totara | 7 |
| Hindmarsh Street | Metrosideros excelsa "Mistral" | 16 |
| Newham Place | Prunus sp. | 12 |
| Bibury Avenue | Quercus palustris | 2 |
| Rosa Place | Ginkgo biloba | 2 |

e) Planting Examples

Tree Pit Planting



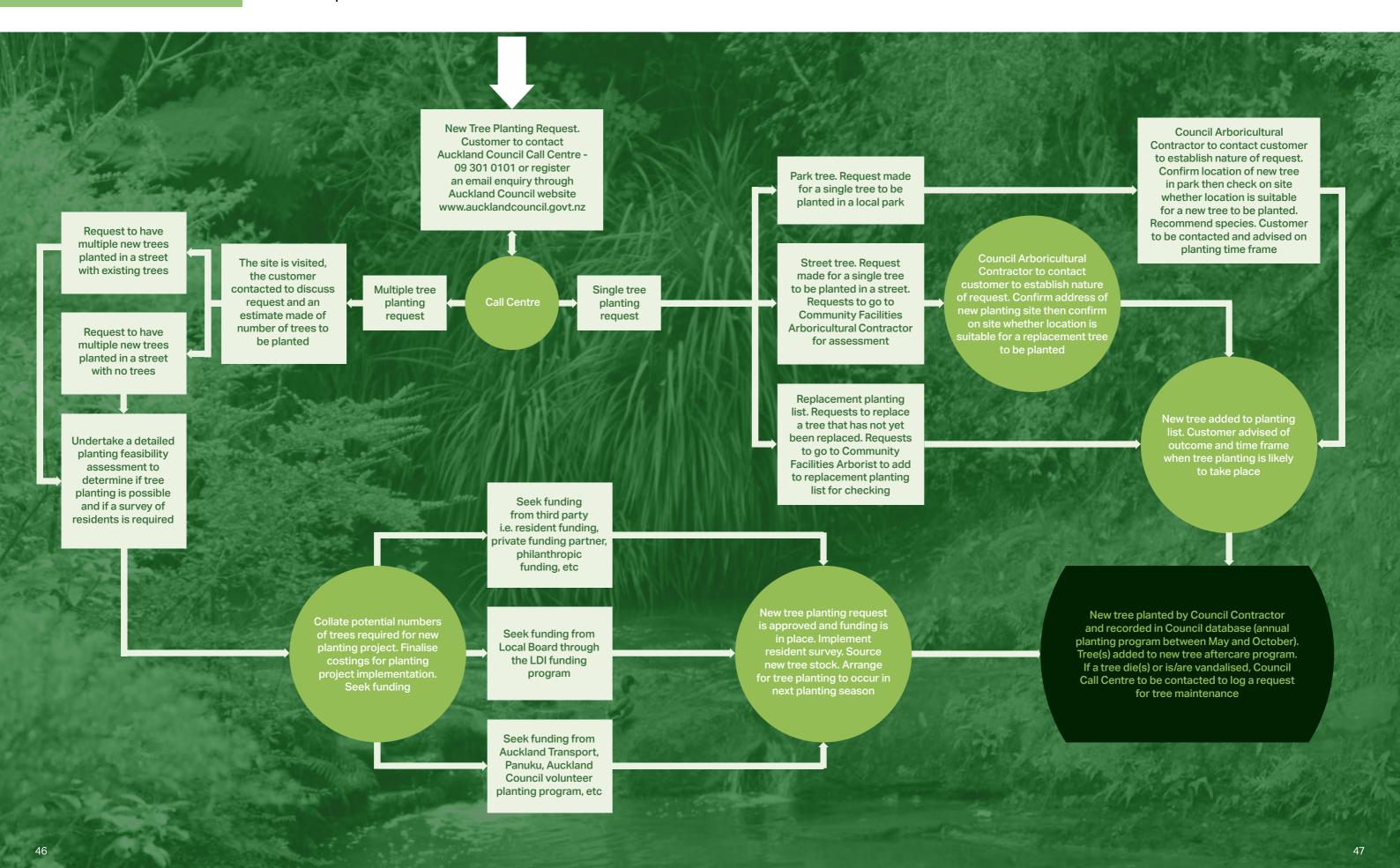
Park Planting



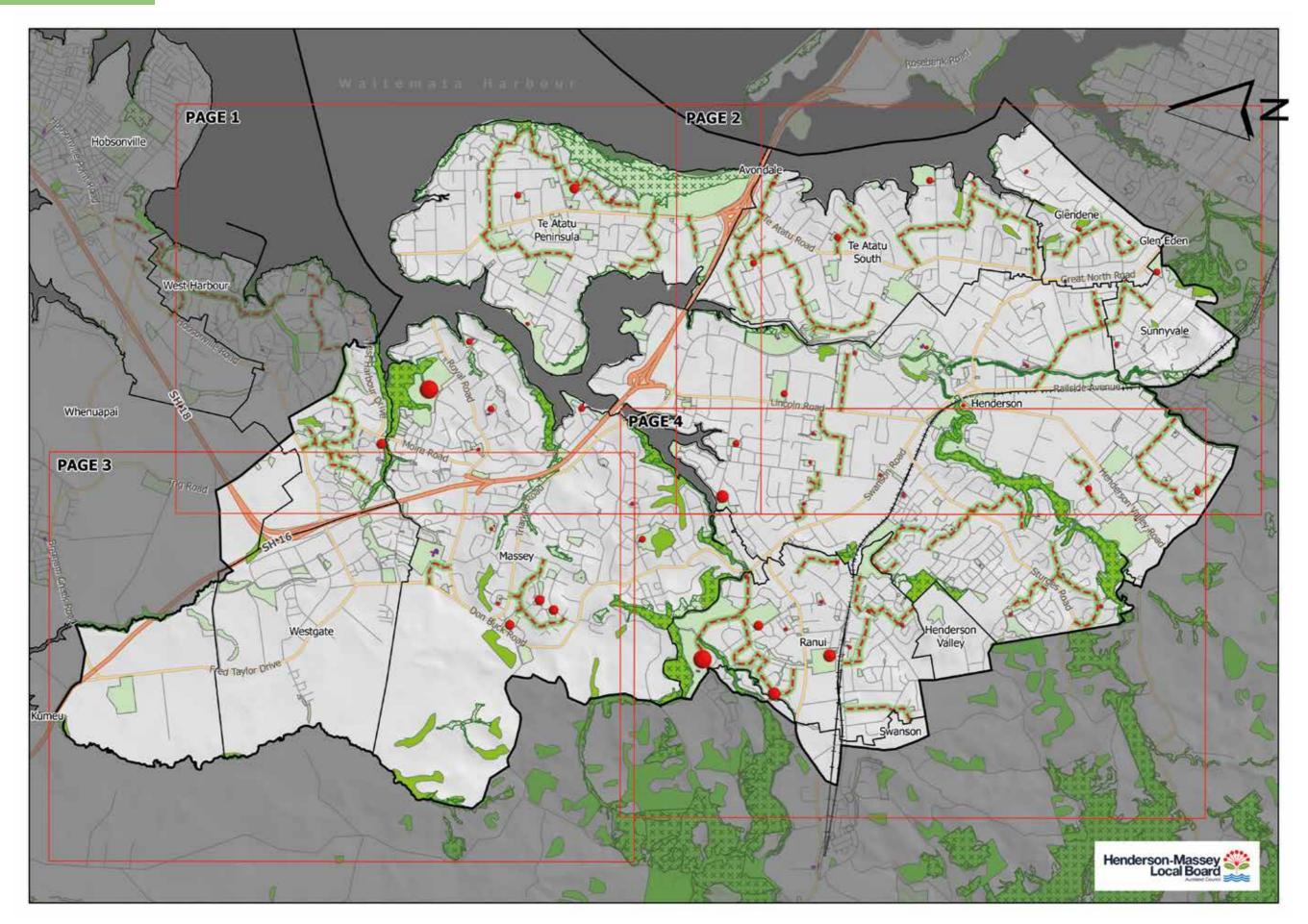
Berm Planting



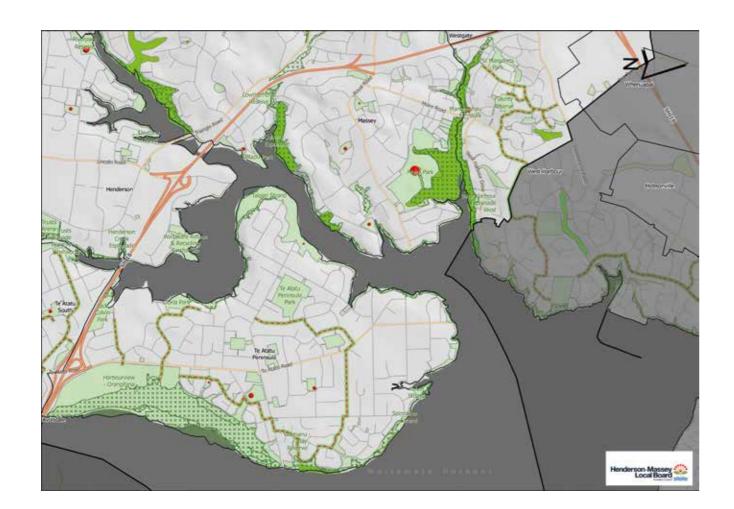
f) Auckland Council Tree Planting Request Process







h) Tree Planting Opportunities Maps Local Board Prioritisation



FOR BOARD DISCUSSION









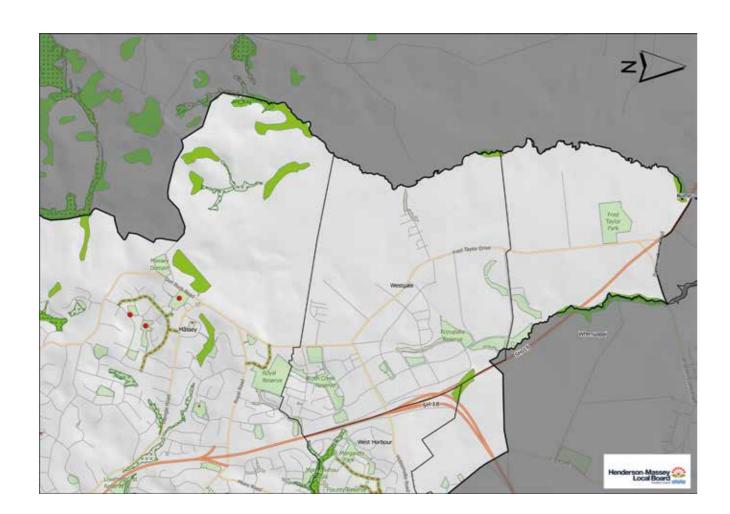
FOR BOARD DISCUSSION

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h) Tree Planting Opportunities Maps Local Board Prioritisation



FOR BOARD DISCUSSION

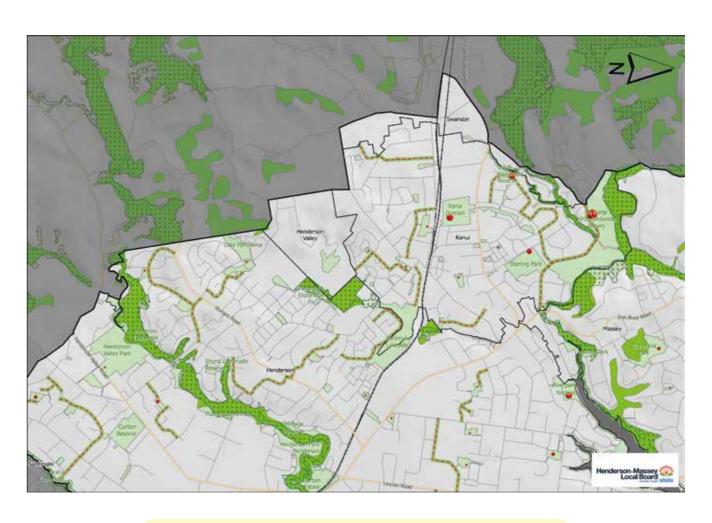






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53









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