

Urban Forest Plan

Ōpāwaho Heathcote River Planting Plan

This plan provides planting guidance, planting types and 24 specified areas along the river for future restoration planting.

For consultation

Guidelines on Plans

Planting Guidance Notes

Introduction

The purpose of the planting guidance is to ensure that appropriate consideration is given to the location and choice of plants, when undertaking restoration planting within the Ōpāwaho Heathcote River corridor.

The desired outcomes of restoration planting include:

- recognition of cultural values
- improved in-stream and riparian habitat, including resulting from increased shade and spawning areas
- increased habitat diversity
- protection of flood water conveyance and the flood plain
- improved native plant and animal diversity, and
- retention of views and recreational values.

The Ōpāwaho Heathcote River is a Site of Ecological Significance (SES) within the Christchurch District Plan (CDP), extending to adjacent land in some reaches.

As such planting must be native species that are naturally occurring and eco-sourced from within the *Low Plains Ecological District*, except where exceptional circumstances (see *Ōtautahi Christchurch Ecosystems* mapping [Ōtautahi Christchurch Ecosystem Webapp](#) for in-depth plant species information).

The Ngā Wai overlay (Ngāi Tahu Site of Significance) of the CDP applies to the Ōpāwaho Heathcote River, indicating its cultural significance. Planting should provide recognition, protection and/or enhancement of the traditional network of Ngāi Tahu mahinga kai sites and include taonga plant species, as appropriate.

Substantive work has been done to reduce river flooding. Restoration planting should not compromise this. Flood management, and planting relative to this, have been accounted for through the combination of approved locations for planting, and the Plant Group Types. This is discussed in more detail in these guidance notes.

Plant Group Types

Plant Group Types provide the flexibility to adapt the choice of plant species to the location, while ensuring that design considerations including flood management, safety and views are accounted for.

In addition to the specific species for the Plant Group Types, consider locations to incorporate ti kōuka (cabbage trees), which are significant in the Canterbury landscape and to Māori.

Plant Group Types:

Type A – Low planting (max.1.2m height). This group primarily consists of plant species that flop over in a flood event. They also allow for good visibility of the river.

Type B – Low planting and shrubs (max. height 6m), plus ti kōuka or similar. This group may incorporate harakeke, but it should be used sparingly, in clumps, and located away from the river edge, bridges and river narrowing, and from the edge of paths.

Type C – Forest mix. These are plants suitable in combination to create a greater level of biodiversity, more akin with naturally occurring native bush.

Type D – Low planting and canopy trees. Canopy trees are clear trunked trees that allow sightlines beneath or allow for flood water to move around them such as totara and kōwhai.

Specified trees. These are native specimen trees generally used for succession planting to willows, poplars and the like. Specimen trees will require prior approval from a Council arborist.

- Where canopy trees are notated, these should be at a minimum of 10m spacings unless otherwise specified.
- Where a forest mix is proposed, provide opportunities for open views and the retention of sightlines where appropriate, via a well-chosen mix of heights and growth forms.

Mahinga Kai/Mahika Kai & Taonga Species

Mahinga kai / mahika kai refers to numerous species and inter-relationships rather than something specific. It includes things such as species, natural habitats, materials and practices used for harvesting food, and places where food or resources are, or were, gathered.

Rākau (plants) of the awa (river) include akeake, harakeke, koromiko, karamu, kōwhai, kōwhitiwhiti, manuka, mikimiki, ngaio, oioi, pōkākā, pūkio, raupō, rautahi, toetoe, and tāwhiri, ti kōuka and wiwi.

Restoration Planting Maintenance

All restoration planting requires maintenance, particularly through its establishment phase. The expectation is that restoration planting shall be maintained by the organisation or group who planted it.

- Restoration planting shall be maintained regularly including watering, mulching and weed removal, for at least 3 to 5 years as it establishes.
- Maintenance requirements are seasonal, with late winter/spring mulching, summer watering and year-round weed removal.
- Canopy trees may require limbing during their establishment to ensure an appropriate future form to ensure sightlines and view shafts and allow for flood water management.

It is intended that these guidelines will be subject to review on a bi-annual basis (every 24 months) to assess their effectiveness.

Plant Selection Process and Guide

Characteristics of the Locality

Identify the characteristics of the locality that guide the plant species including:

- The river profile and associated zones (upper bank, crest, mid bank and toe)
- Planting conditions
- Water type (fresh, brackish, saline)
- Width of the river.

River Profiles and Site Conditions

[Characteristic profiles diagram to be inserted]

Plant Selection and Preparation

- Plant species shall be selected from the CCC list provided below and reviewed by the Parks Biodiversity Team, unless otherwise specifically agreed.
- Fruit and nut trees or wildflowers shall **not** be located within the SES or where seeds could drop and be carried by the waterbody.
- Only low planting that will flop over in a flood event should be used within 1.5m vertical of the river channel, unless otherwise specifically agreed.
- Select plants, including trees, with consideration of their adult dimensions and potential root structure and extent, relative to the proximity of neighbouring properties, buildings, electrical conductors, rights-of-way and other infrastructure and assets, above and below ground.
- Locate plants, including trees, without unduly compromising services, safety or amenities, or causing excessive boundary encroachments or shading.
- Expect that each tree will grow healthily for at least 50 years.
- Space plants according to the local conditions and potential plant size.
- Space canopy trees sufficiently far apart to allow healthy development of their canopies as they mature.

- Plants, including trees, will be native species unless where exceptional circumstances, noting further approvals may be required.
- Undertake site preparation as needed, including the removal of nuisance plants and soil restoration. The removal of trees, including by way of poisoning, will require prior approval from a Council arborist.

[Plant list to be inserted – to include species name, zone, Māori and common names, plant type, water type, height, plant group type as related to the plans, and includes mahinga kai species]

CPTED & Safety

Crime Prevention Through Environmental Design (CPTED) is a well-documented and accepted approach to reducing the opportunity for crime and the fear of crime.

Two key principles of CPTED - providing for surveillance and building social cohesion and community connectivity – can be directly impacted by restoration planting. The act of planting and maintenance, as well as the location and type of restoration planting, can have an impact on these principles.

- Planting shall be well set back from the intersection of paths, including pedestrian and shared paths, and cycleways and at street intersections, to provide good visibility and reduce potential for user conflicts.
- Plant only low plants to a maximum height of 1.2m and/or trees with clear trunks to 2.5m height within 2m of a formed pathway. This to ensure clear sightlines along the path and minimise the opportunities for a person to hide.
- Plant only low plants around seating areas for safety, views and access.
- Provide for sightlines and gaps through the vegetation where informal paths have been included.
- Provide sightlines through and between planted areas to retain visibility between paths, streets, bridges and areas of open space.
- Retain wide views and visibility from multiple areas to key routes, such as paths from bus stops likely to be used at night, to maintain surveillance.
- Retain sightlines from private property to reserves.

- Plant trees and larger shrubs well away from lighting to maintain light quality and extent.
- Do not place strappy plants such as harakeke or carex within 1.5m of a path, where they could create a trip hazard or become entangled in wheels.
- No planting shall be undertaken by volunteers closer than 1.5m to a formed carriageway (i.e. the street asphalt).

Access and Use

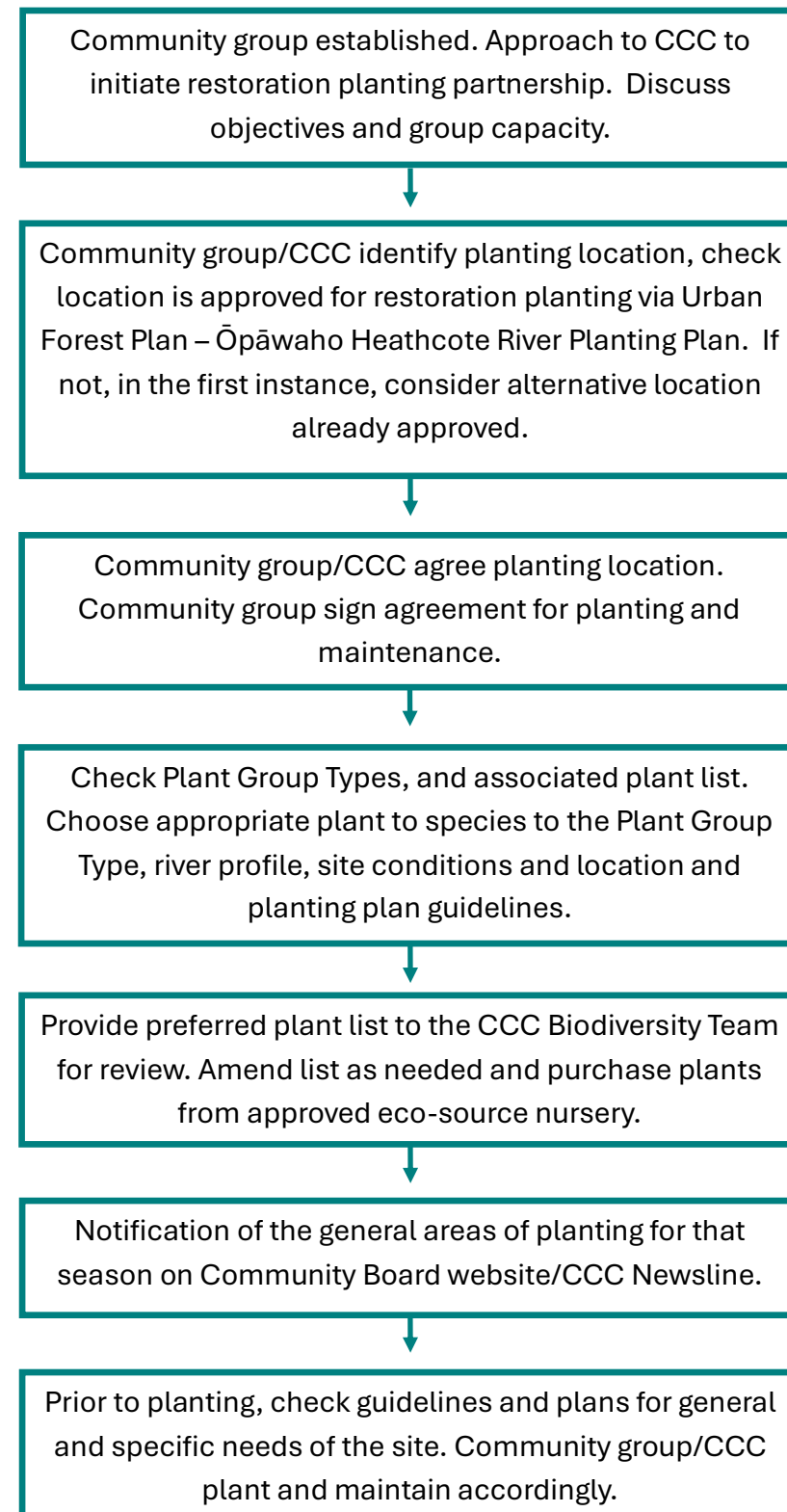
- Maintain or provide for important views between a heritage item, the heritage setting and the surrounding area.
- Provide views to the river from adjacent paths, including to the water, at intervals of not more than 30m linear length. Where there is continuous massing of planting intended, ensure that these are wide views.
- Use smaller sedges where the river narrows to retain views of the water.
- Retain 5m clear access strip between plantings where a future shared path/cycle route is indicated.
- Provide physical access for the public to the water's edge, particularly where bank gradients are shallow.
- Retain open areas for a range of recreational and cultural values including picnicking, playing and white baiting, both adjacent to and near the water.

Maintenance

- Plant along the crest of the riverbank to reduce the need for line trimming.
- Place ti kōuka, harakeke and other strappy plants away from grassed areas where they may cause a maintenance nuisance i.e. leaves jam up mowers/ weed eaters.
- Provide access to the water for river maintenance for at least every 100m of the river course.
- Do not plant out identified load-out areas (areas for river maintenance equipment).

Restoration Planting Process Diagram

(for CCC staff)



Notes For All Landscape Plans

Where there is conflict between these guidelines and those within the site-specific guidelines, the site-specific guidelines will prevail

Tree spacings shall be:

- min. of 7m centres, unless where specified within a specific plan.
- min. 2m offset for low voltage power.
- min. 3m offset for 11kv power.
- min. 5m offset for 33-66kv min.

Min. 1m offset for trees and tall shrubs from all other services and hard paving not mentioned above.

Any planting that occurs over underground services shall consist of grasses and shallow-rooted shrubs only.

No tree shall be planted closer than 3.0m to a formed pathway.

No planting shall be planted closer than 1.5m to a formed carriageway (i.e. the street asphalt) for safety purposes.

No planting shall be within 3m of a road bridge abutment.

Carex secta shall not be planted within 1m of the river channel.

*No tree removal shall take place without specific approval from a Council arborist and ecologist.

Any planting within 1.5m vertical of the river channel shall be low and floppy, from the approved flood plain species list, to allow for flood water movement.

Do not place strappy plants such as harakeke or carex within 1.5m of a path, where they could create a trip hazard or become entangled in wheels.

If planting over underground services, use grasses and shallow-rooted shrubs only.

**Note: For the purpose of this document, any plant that has the potential to be classed as a tree (in alignment with the CCC Tree Policy) but has a current diameter of less than 100mm at the base and has not been specifically planted will be regarded as a seedling and therefore can be removed without CCC arborist or ecologist approval.*

Notes for Specific Plan Areas

Area 1: Spreydon Domain

- No tree shall be planted closer than 5.0m from a sports field and no tree canopy drip line (at maturity) shall extend above a sports field.
- Succession tree planting (replacement of poplar trees), with the approval of the Council arborist and ecologist, shall be at 10m minimum. centres and shall not intrude (as at maturity) beyond existing levels of shading on adjacent private property.
- Plantings shall generally follow contours.
- A load-out area which is accessible to vehicles, of a minimum 3m x 3m, shall be retained immediately adjacent to the river for operations maintenance.
- Sightlines shall be provided between areas of planting to the central pathway and the bridge, to retain visibility.
- Character avenue planting shall be maintained clear of underplanting along the central pathway.
- Sightlines from private property to the reserve shall be retained to support CPTED and views.

Area 3: Centennial Park

- Succession tree planting (replacement of Willow trees) shall be at 8m min. centres and be clear-trunked canopy trees. The removal of trees, including by way of poisoning, will require prior approval from a Council arborist.
- The load-out area shall be retained clear of planting for river operations maintenance.
- Sightlines between shared paths and pedestrian paths, and where paths intersect, shall be retained to support CPTED and to prevent conflicts between pathway users.
- With the above exceptions, obvious gaps within the existing areas of planting are enabled to be planted with native plants, while allowing visibility of the water.

Area 4: Ashgrove Terrace Confluence (End to Ferniehurst St)

- Planting shall be kept clear of seating to allow sufficient physical access and visibility of the water.
- Any planting shall be at least 1m from the watermain traversing the crest or upper bank of the river.

- Succession tree planting (replacement of exotic trees) shall be at minimum 8m centres and be clear trunked species. The removal of trees, including by way of poisoning, will require prior approval from a Council arborist.

Area 5: Cashmere Riverbank Reserve/Ashgrove Terrace Central (Ferniehurst St to Fairview St)

- The crest and upper bank shall be predominantly clear trunked trees and low underplanting.
- No harakeke shall be planted on the toe of the bank or in proximity to bridges or river narrowing.
- Clear-trunked canopy trees shall be planted at min. 10m centres, or if clustered, shall have a minimum distance of 15m between clusters.
- Sightlines shall be provided between areas of planting to the pathway and bridges, and to and from adjacent streets, to retain visibility and assist CPTED.
- Planting shall be kept clear from seating to allow access to the seating and visibility of the water.
- Allow 2m clear width of planting where an informal (grass) pedestrian path is notated on the plan.
- Use planting to better define the carriageway and minimise riverbank car parking.
- Provide for almost continuous low riparian planting along the mid bank and toe of the south riverbank, approximately 2m wide following the contour, while allowing access to and visibility of the water.
- Note that clusters of underground services are located at street intersections i.e. Cashmere View Terrace. These areas should not be planted, or if considered, should only be planted using grasses and shallow-rooted shrubs.

Area 6: Cashmere Riverbank Reserve/Ashgrove Terrace Central (Fairview St to Barrington St)

- The crest and upper bank shall be predominantly clear trunked trees and low underplanting.
- No harakeke shall be planted on the toe or in proximity to bridges or river narrowing.
- Clear-trunked canopy trees shall be planted at min. 10m centres, or if clustered, shall have a minimum distance of 15m between clusters.

- Sightlines shall be provided between areas of planting to the pathway and bridges, and to and from adjacent streets, to retain visibility and assist CPTED.
- Allow 2m clear width of planting where an informal (grass) pedestrian path is notated on the plan.
- Use planting to better define the carriageway and minimise riverbank parking.
- Provide for almost continuous low riparian planting along the mid bank and toe of the south riverbank, approximately 2m wide following the contour, while allowing access to and visibility of the water.

Area 7: Ashgrove Terrace North (Barrington St to Colombo St)

- The crest and upper bank shall be predominantly clear trunked trees planted at minimum 8m centres, and low underplanting, or if trees clustered, shall have a minimum distance of 15m between clusters.
- No harakeke shall be planted on the toe or in proximity to bridges. Harakeke shall be used sparingly and only planted in clusters at distance.
- Sightlines shall be provided between areas of planting to bridges, and to and from adjacent streets, to retain visibility for cyclists and pedestrians of the carriageway and other paths, to avoid user conflicts and to assist CPTED.
- A large accessible open area shall be retained clear of planting adjacent to the river for summer picnicking.
- Where sufficient space, provide 2m clear width for an informal (grass) path near the river, weaving between the trees and away from the carriageway.
- Use planting to better define the carriageway and minimise riverbank vehicle parking.
- When planting in the proximity of The Malthouse, a heritage building and setting, do not block or compromise views to the river.

Area 8: Hunter Terrace

- Sightlines shall be provided between areas of planting to bridges, and to and from adjacent streets, to retain visibility for cyclists and pedestrians of the carriageway and other paths, to avoid user conflicts and to assist CPTED.
- A known flood area, new planting is restricted to low planting and clear-trunked trees to provide for flood water conveyance.
- Allow 2m clear width of planting where an informal (grass) pedestrian path is notated on the plan.
- Site preparation may be required including the removal of nuisance plants and trees prior to planting.
- Succession tree planting (replacement of exotic trees) shall be at 10m minimum centres and be clear-trunked species. The removal of trees, including by way of poisoning, will require prior approval from a Council arborist and ecologist.

Area 8: Waimea Terrace/Eastern Terrace (to Sandwich Rd)

- Sightlines shall be provided between areas of planting to bridges, and to and from adjacent streets, to retain visibility for cyclists and pedestrians of the carriageway and other paths, to avoid user conflicts and to assist CPTED.
- New planting to be low planting and clear-trunked trees to provide for water conveyance.
- Provide 1.5m clear width for paths adjacent in proximity to the riverbank, where space allows.
- Pest trees (Ailanthus altissima) shall be removed prior to planting. Replacement of these trees shall be clear trunked trees placed at 10m minimum centres.
- Succession tree planting (replacement of exotic trees) shall be at 10m min. centres and be clear trunked species. The removal of trees, including by way of poisoning, will require prior approval from a Council arborist.
- No harakeke shall be planted on the toe or in proximity to bridges. Harakeke shall be used sparingly and only planted in clusters at distance.

Area 9: Centaurus Reserve No 1/ Farnley Reserve / Eastern Terrace

- New planting is restricted to low plants that flop over on the toe and mid bank and predominantly clear-trunked trees on

the crest and upper bank, with some underplanting, to provide for flood water conveyance.

- Sightlines shall be provided from entry points to the reserve, car parking areas and paths, to retain visibility for cyclists and pedestrians to assist CPTED and avoid user conflicts.
- Retain sightlines from adjacent buildings where applicable to assist CPTED and provide outlook.
- Harakeke shall not be planted on the toe, used sparingly and only planted in clusters at distance. Some maintenance or removal of existing harakeke may be required.
- Pest trees (Ailanthus altissima) shall be removed prior to planting. The removal of trees, including by way of poisoning, will require prior approval from a Council arborist.

Area 11: Beckenham Ponds

- Sightlines shall be provided between areas of planting to the pathway, bridges and seating areas, as well as from the street, to retain visibility and assist CPTED.
- Maintain viewshafts to the reserve and ponds from adjacent private property.
- Planting shall be kept clear from seating and jetties to allow access and visibility of and interaction with the water.
- Allow 2m clear width of planting where an informal (grass) pedestrian path is notated on the plan.

Area 11: Fifield Terrace, Opawa

- Planting shall be predominantly clear trunked trees and low underplanting allowing for flood water to perforate.
- Trees shall be planted at minimum 10m centres, or if clustered, shall have a minimum distance of 15m between clusters.
- Allow 1.5m clear width of planting where an informal (grass) pedestrian path is notated on the plan.
- Retain open areas for a range of recreational and cultural values including for boat launch and white baiting, adjacent to the water.
- Sightlines shall be provided between areas of planting to bridges, and to and from adjacent streets, to retain visibility

for cyclists and pedestrians of the carriageway, to avoid user conflicts and to assist CPTED.

Area 12: Eastern Terrace/ Riverlaw Terrace (Tennyson St to Wilsons Rd)

- A known flood area, new planting is restricted to low planting and clear-trunked trees to provide for flood water conveyance.
- Clear-trunked canopy trees shall be planted at minimum 10m centres, or if clustered, shall have a minimum distance of 15m between clusters.
- Allow 1.5m clear width of planting where an informal (grass) pedestrian path is notated on the plan.
- Retain open areas for a range of recreational and cultural values including for boat launch and white baiting, adjacent to the water.

Area 13: Fifield Terrace / Riverlaw Terrace, Waltham

(Waltham Rd to Ensors Rd)

- The mid bank shall be predominantly clear trunked trees and low underplanting, with some opportunities for more forest like planting at the crest and upper bank, while allowing for flood water to perforate. Shrub planting should not create a corridor of planting that restricts water conveyance in flood events.
- Clear-trunked canopy trees shall be planted at minimum 10m centres, or if clustered, shall have a minimum distance of 15m between clusters.
- No harakeke shall be planted on the toe or in proximity to bridges or river narrowing.
- Planting shall be kept clear from seating to allow access to the seating and visibility of the water.
- Allow 1.5m clear width of planting where an informal (grass) pedestrian path is notated on the plan.
- Retain open areas for a range of recreational and cultural values including for boat launch and white baiting, adjacent to the water.

Area 13: Riverlaw Terrace North

- Planting shall be predominantly clear trunked trees and low underplanting allowing for flood water to perforate. Trees shall be planted at minimum 10m centres, or if clustered, shall have a minimum distance of 15m between clusters.
- Allow 1.5m clear width of planting where an informal (grass) pedestrian path is notated on the plan.
- Retain open areas for a range of recreational and cultural values including for boat launch, picnicking and white baiting, adjacent to the water.
- Sightlines shall be provided between areas of planting to the pathway, bridges and the streets for visibility of the river and to assist CPTED.
- Place trees to retain views from private property to the river.
- Retain load-out areas free of planting.

Area 14 & 15: Riverlaw Terrace Central and South

- Planting shall be predominantly clear trunked trees and low underplanting allowing for flood water to perforate.
- Where there are springs and seepage, consider the use of clusters of kahikatea and underplanting to provide a forest effect, while allowing for viewshafts to the river from private property.
- Otherwise, trees shall be planted at minimum 10m centres, or if clustered, shall have a minimum distance of 15m between clusters.
- Allow 1.5m clear width of planting where an informal (grass) pedestrian path is notated on the plan.
- Retain open areas for a range of recreational and cultural values including for boat launch and white baiting, adjacent to the water.
- Sightlines shall be provided between areas of planting to bridges, and to and from adjacent streets, to retain visibility for cyclists and pedestrians of the carriageway, to avoid user conflicts and to assist CPTED.
- Place trees to retain views from private property to the river.

Area 17: Louisson Place

- Planting shall be predominantly clear trunked trees and low underplanting allowing for flood water to perforate.
- Trees shall be planted at minimum 10m centres, or if clustered, shall have a minimum distance of 15m between clusters.
- Sightlines shall be provided between areas of planting to the bridge to retain visibility for cyclists and pedestrians, to avoid user conflicts and to assist CPTED.
- Site preparation may be required including the removal of nuisance plants and trees prior to planting. The removal of trees, including by way of poisoning, will require prior approval from a Council arborist.
- Retain pedestrian access and a small open area for white baiting, adjacent to the water.

Area 21: Radley Park

- In conjunction with Connal Street, the area has significant opportunity to support high ecological/biodiversity values.
- Site preparation may be required including the removal of nuisance and pest plants and trees prior to planting. The removal of trees, including by way of poisoning, will require prior approval from a Council arborist.
- Planting shall be kept well clear of the dog park, including agility course, and from the playground.
- Wide open areas should be retained along walkways, with broad sightlines, including to bridges and other paths and from the adjacent streets, to retain visibility for cyclists and pedestrians to avoid user conflicts and to assist CPTED.
- Planting shall not obstruct lighting.
- An open area shall be retained clear of planting adjacent to the river for summer picnicking and good visibility of the water.
- Allow 2m clear width of planting where an informal (grass) pedestrian path is notated on the plan.

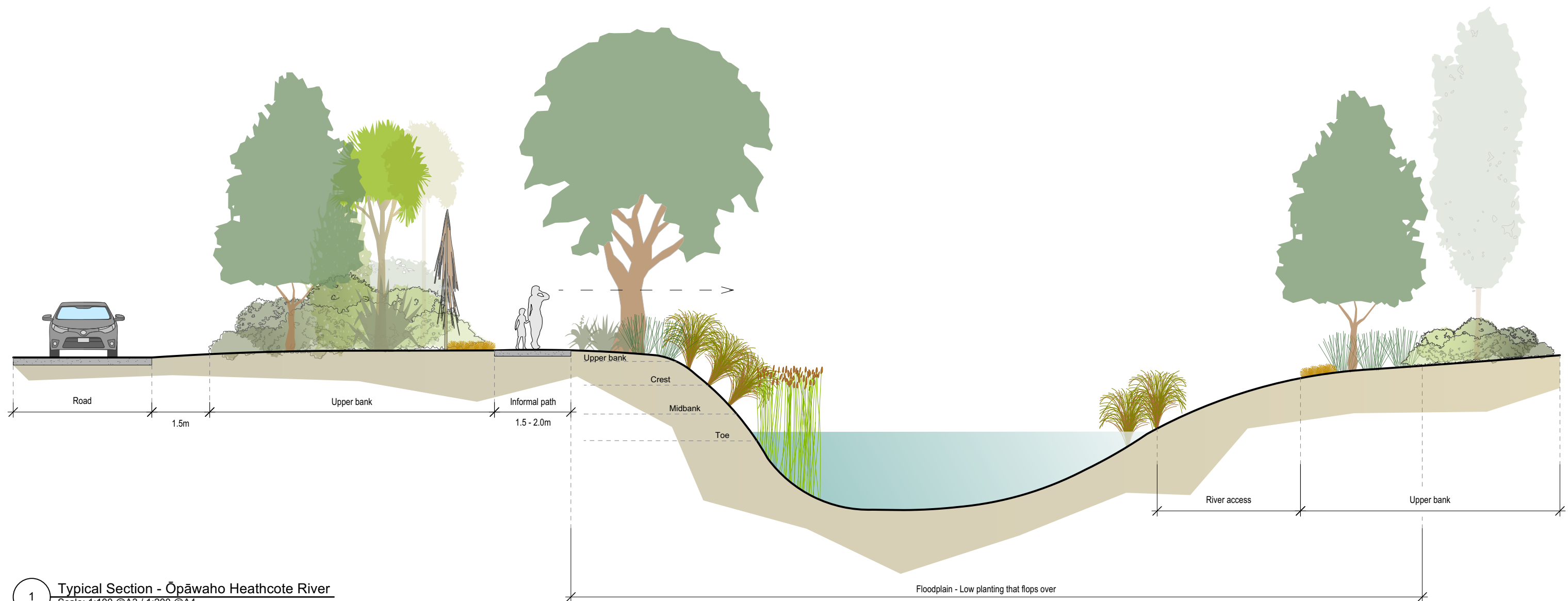
Area 23: The Cut

- Retain open areas adjacent to the water for a range of recreational and cultural values including for boat launch, picnicking and fishing.
- Broad sightlines should be retained along walkways, including to bridges and other paths and from adjacent streets, to retain visibility for cyclists and pedestrians to avoid user conflicts and to assist CPTED.
- Place trees and shrubs to retain views from adjacent buildings to retain outlook and assist CPTED.
- Planting shall not obstruct lighting. Planting shall be kept clear of seating to allow for access, safety, and to retain views to the water.

Area 22 and 24: Woolston Loop (Connal Street, Cumnor Terrace, Kennaway Reserve)

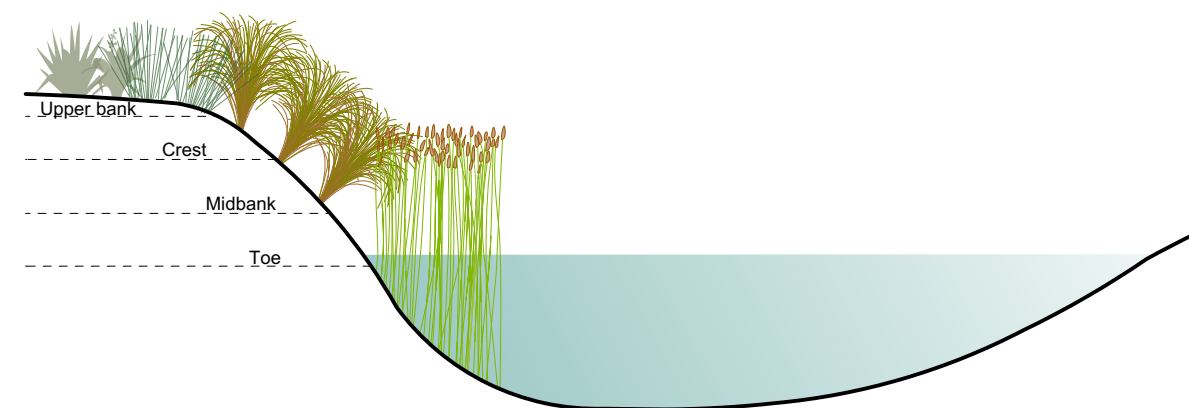
- The area has significant opportunity to support high ecological/biodiversity values, with the support of further riparian/margin planting.
- Site preparation may be required including the removal of nuisance and pest plants and trees prior to planting. The removal of trees, including by way of poisoning, will require prior approval from a Council arborist and ecologist.
- Allow 2m clear width of planting where an informal (grass) pedestrian path is notated on the plan.
- Retain 4m clear width of planting from Long Street end to the SH74 bridge to maintain the opportunity for a future shared path/cycle route.
- Allow for frequent breaks in planting and areas of low planting to provide for visibility of the path ahead. Where possible provide for visibility to paths from the activity of adjacent sites and streets to assist CPTED.

Original size mm
100
50
30
10
0



1

Typical Section - Ōpāwaho Heathcote River
Scale: 1:100 @A3 / 1:200 @A4

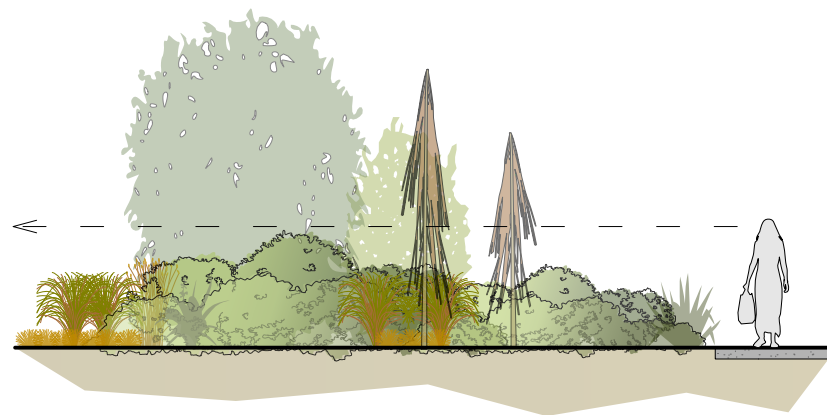


2

Section - Ōpāwaho Heathcote River Bank
Scale: 1:100 @A3 / 1:200 @A4

© Copyright Christchurch City Council © Aerial Photography Copyright Terralink International Ltd

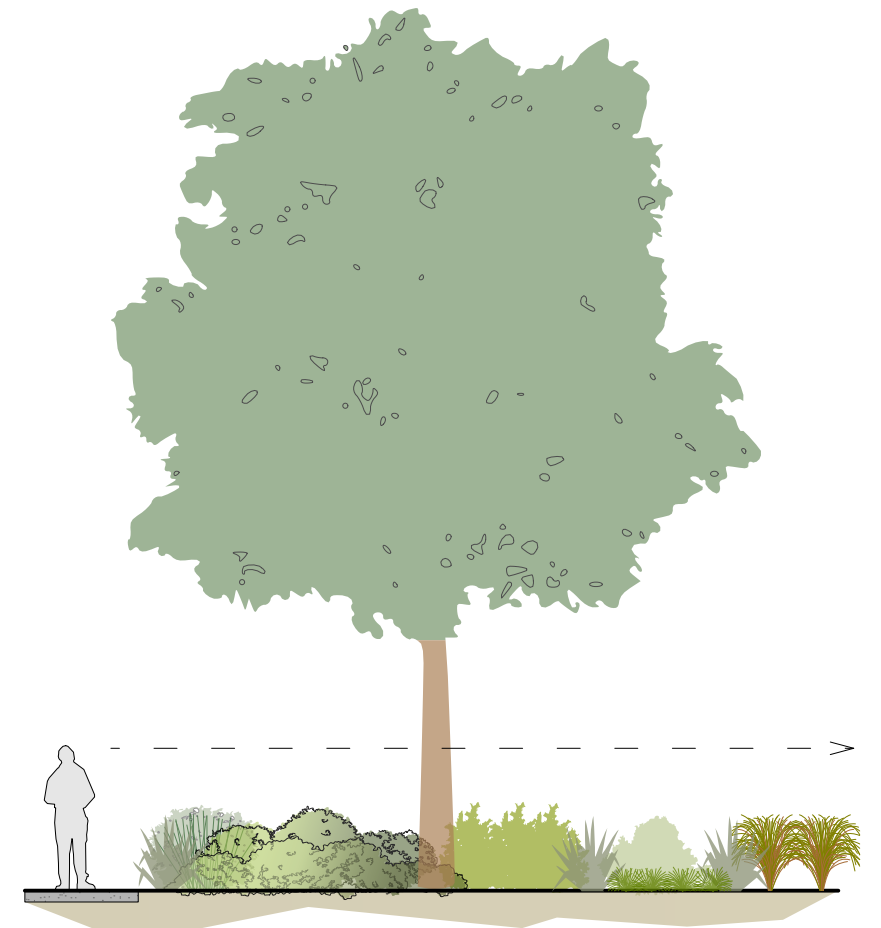
Original size mm
100
50
30
10
0



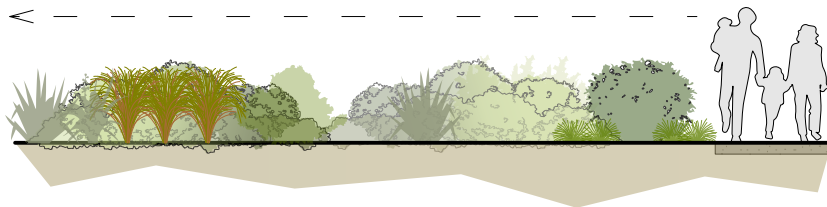
Low planting & shrubs
Type B



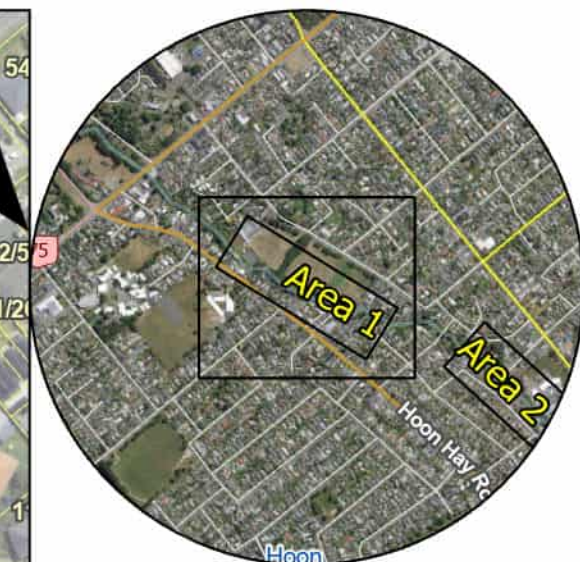
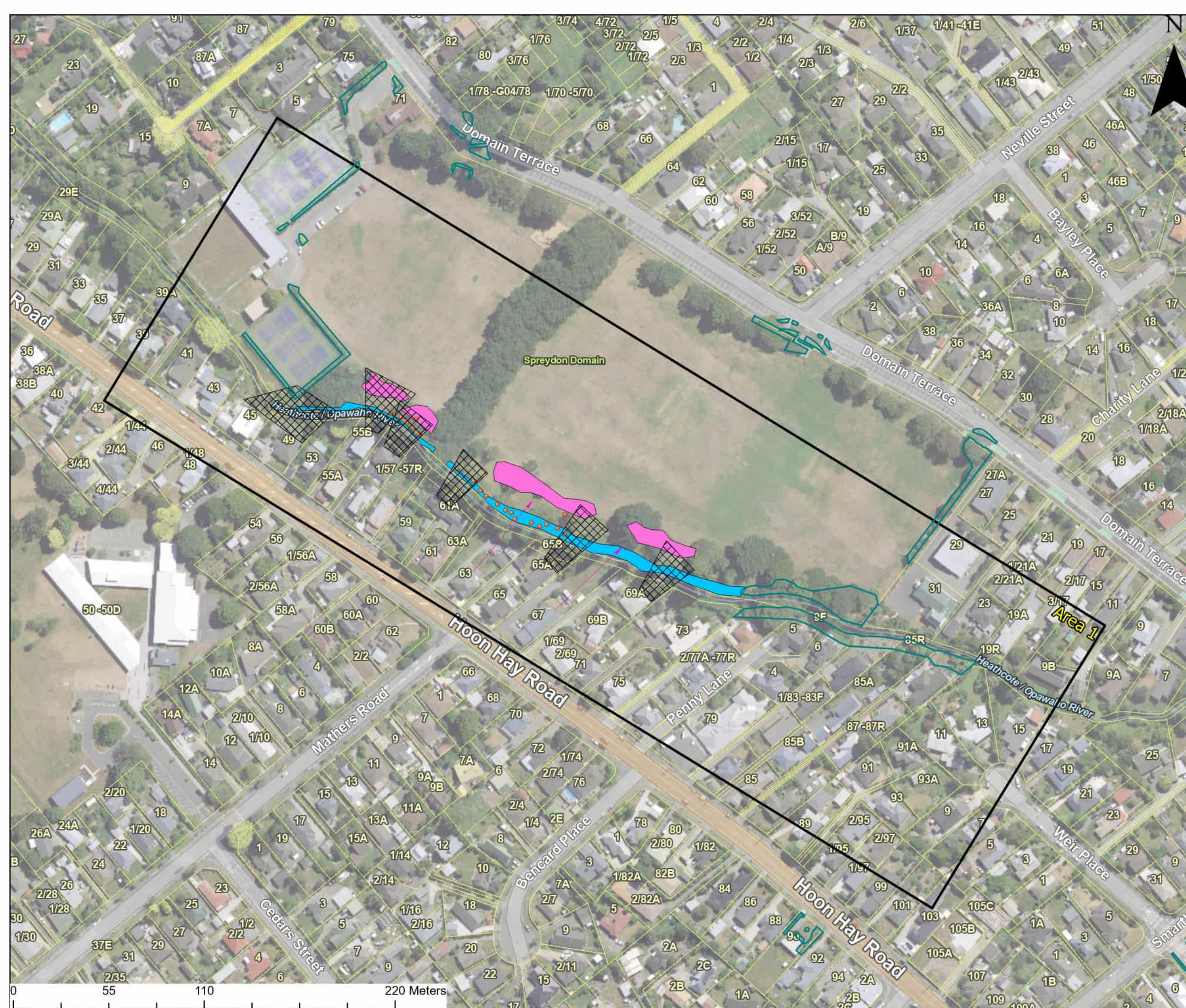
Forest mix
Type C



Low planting & canopy trees
Type D



Low planting
Type A



Ōpāwaho Heathcote River Draft Spatial Planting Plan

Area 1
Spreydon Domain

Legend

- Existing Natural Area
 - Area
 - Open sightlines to river
 - Property Viewshaft
 - Specimen Tree
 - Park Area
 - Existing Planting Areas
- ### Plant Group Types
- A - Low planting
 - B - Low planting & shrubs



Opāwaho Heathcote River Draft Spatial Planting Plan

Area 2
Greenpark Street

Legend

- Existing Natural Area
- Area
- Open sightlines to river
- Property Viewshaft
- Specimen Tree
- Park Area
- Existing Planting Areas

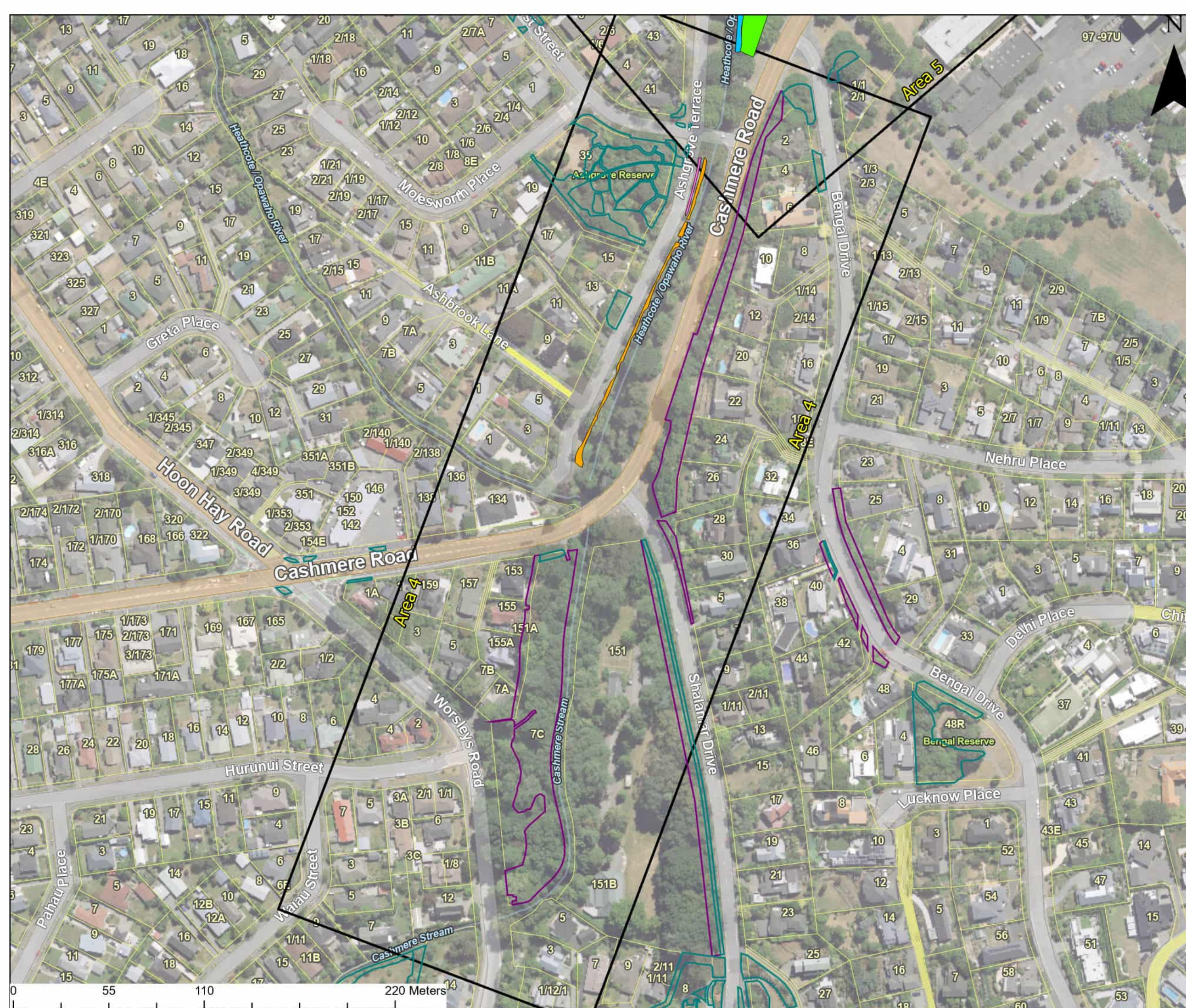


Ōpāwaho Heathcote River Draft Spatial Planting Plan

Area 3 Centennial Park

Legend

- Existing Natural Area
 - Area
 - Open sightlines to river
 - Property Viewshaft
 - Specimen Tree
 - Park Area
 - Existing Planting Areas
- Plant Group Types**
- A - Low planting
 - B - Low planting & shrubs
 - C - Forest mix
 - D - Low planting and canopy trees



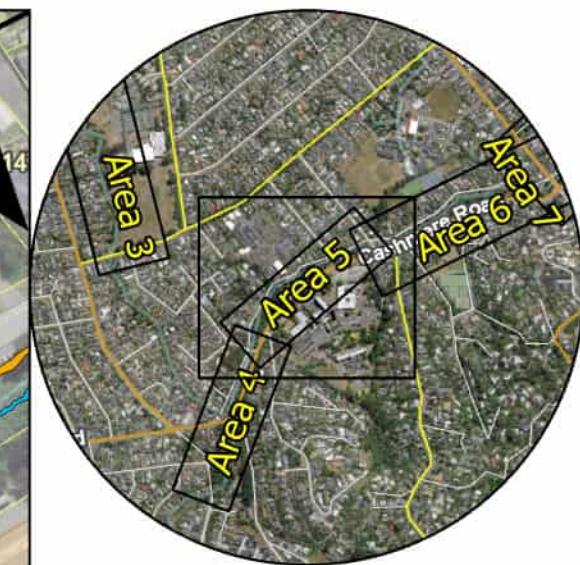
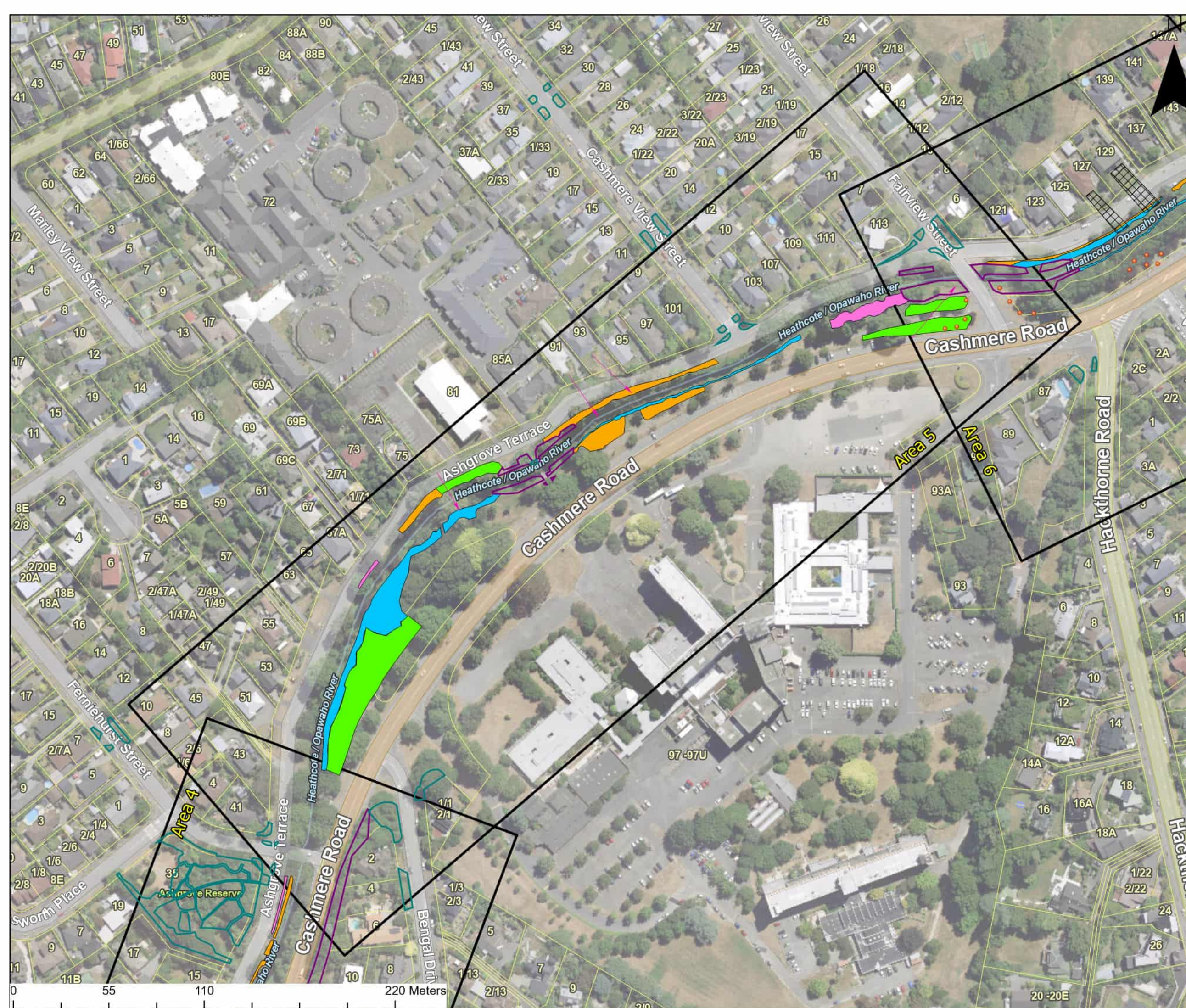
Opāwaho Heathcote River Draft Spatial Planting Plan

Area 4

Ashgrove Terrace
Confluence (end to
Ferniehurst Street)

Legend

- Existing Natural Area
 - Area
 - Open sightlines to river
 - Property Viewshaft
 - Specimen Tree
 - Park Area
 - Existing Planting Areas
- ### Plant Group Types
- A - Low planting
 - B - Low planting & shrubs
 - C - Forest mix
 - D - Low planting and canopy trees



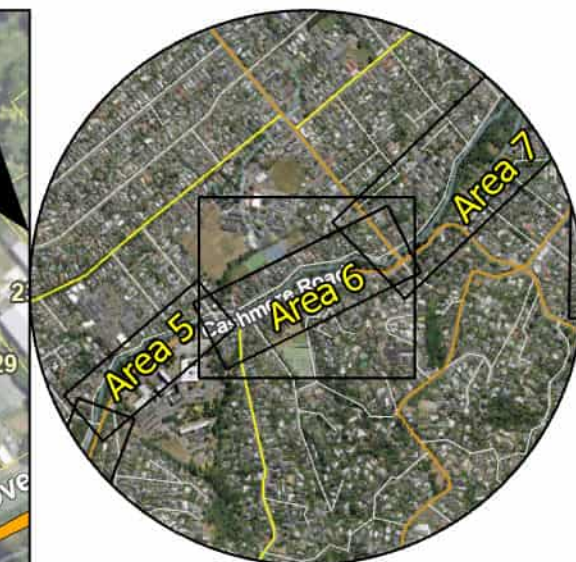
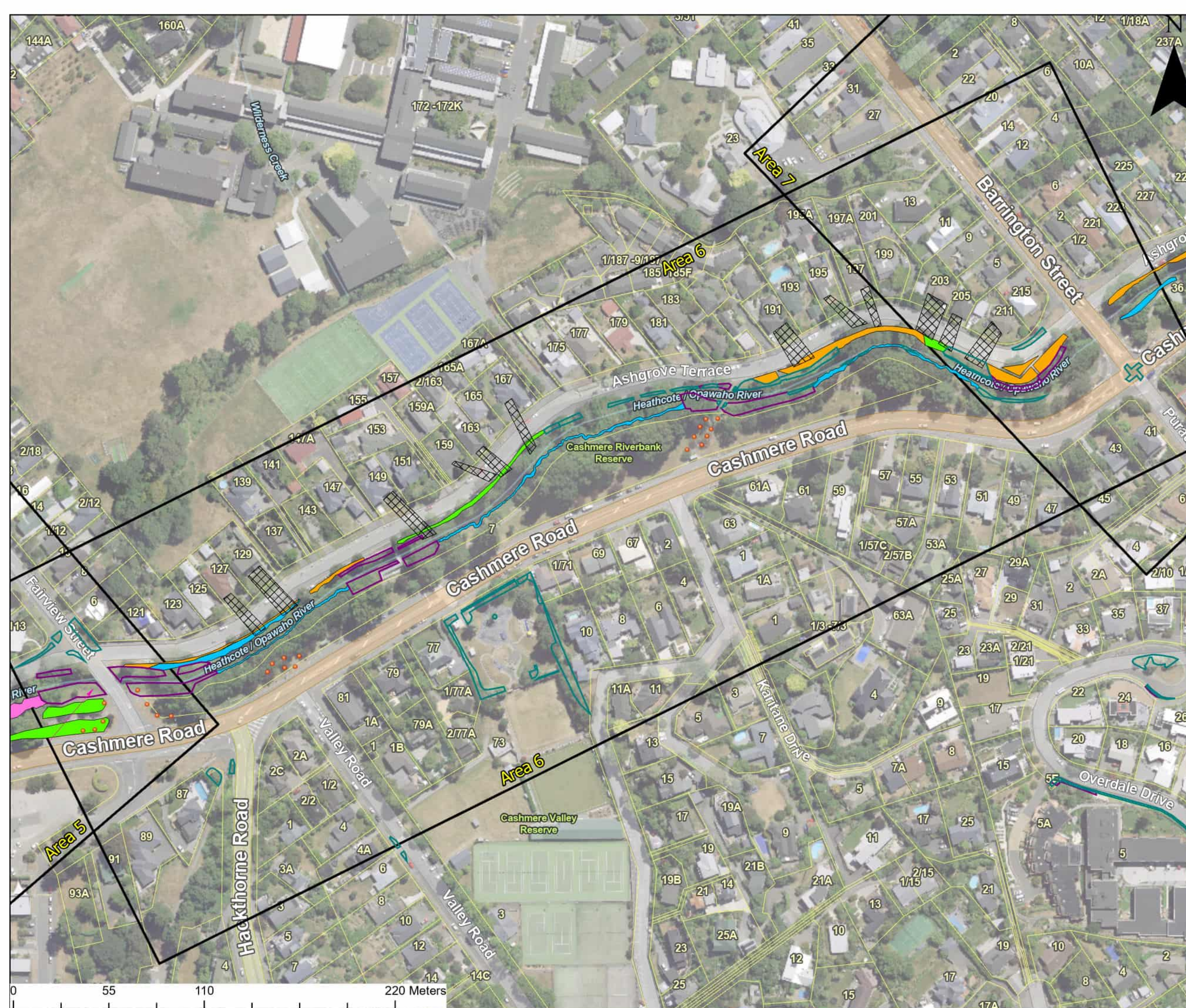
Ōpāwaho Heathcote River Draft Spatial Planting Plan

Area 5

Cashmere Riverbank
Reserve / Ashgrove
Terrace Central
(Ferniehurst Street to
Fairview Street)

Legend

- Existing Natural Area
 - Area
 - Open sightlines to river
 - Property Viewshaft
 - Specimen Tree
 - Park Area
 - Existing Planting Areas
- Plant Group Types**
- A - Low planting
 - B - Low planting & shrubs
 - C - Forest mix
 - D - Low planting and canopy trees



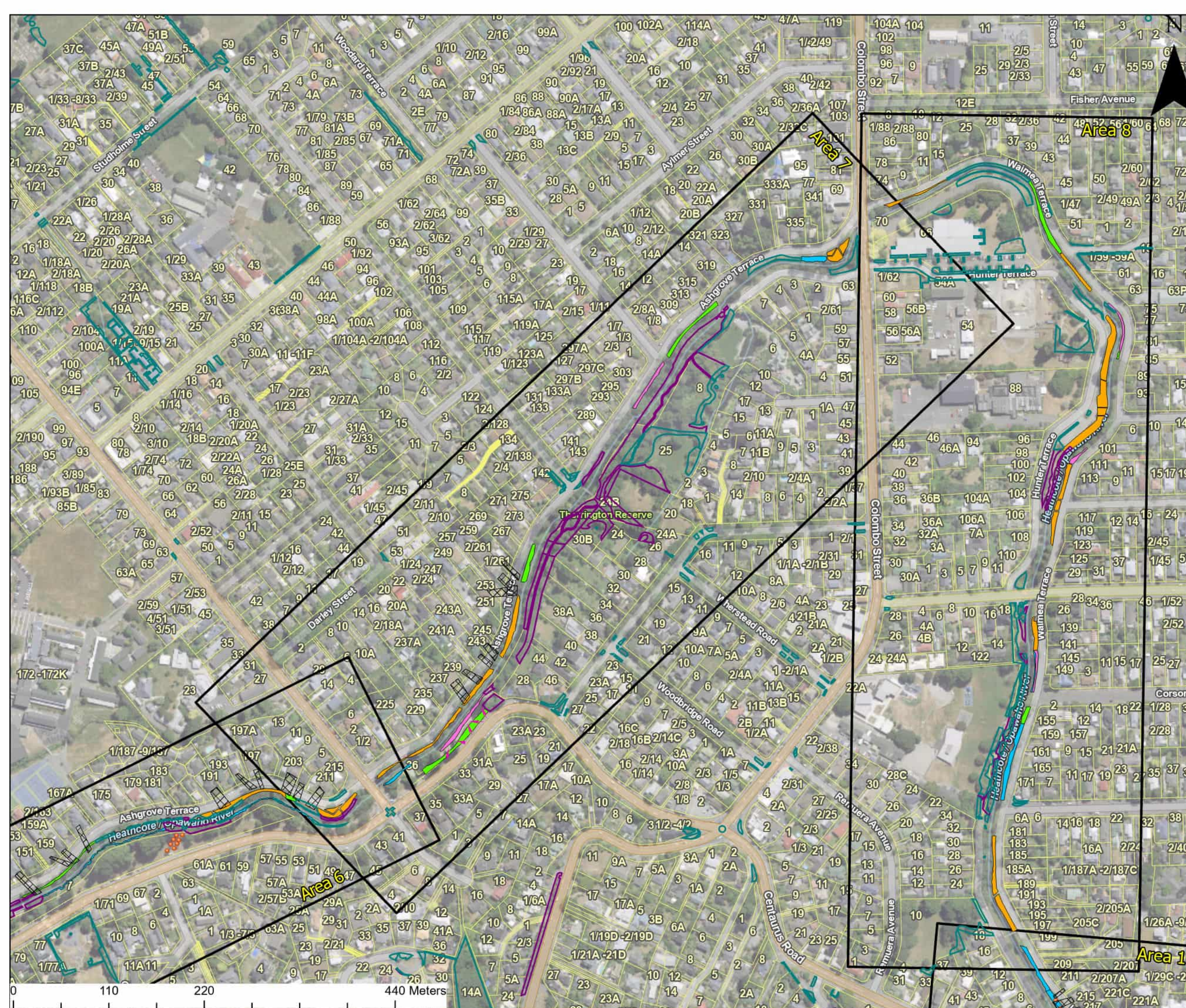
Opāwaho Heathcote River Draft Spatial Planting Plan

Area 6

Cashmere Riverbank
Reserve / Ashgrove
Terrace (Fairview
Street to Barrington
Street)

Legend

- Existing Natural Area
 - Area
 - Open sightlines to river
 - Property Viewshaft
 - Specimen Tree
 - Park Area
 - Existing Planting Areas
- Plant Group Types**
- A - Low planting
 - B - Low planting & shrubs
 - C - Forest mix
 - D - Low planting and canopy trees



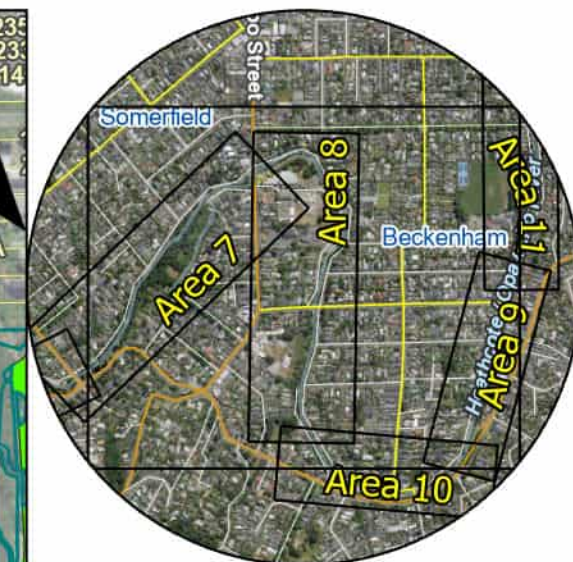
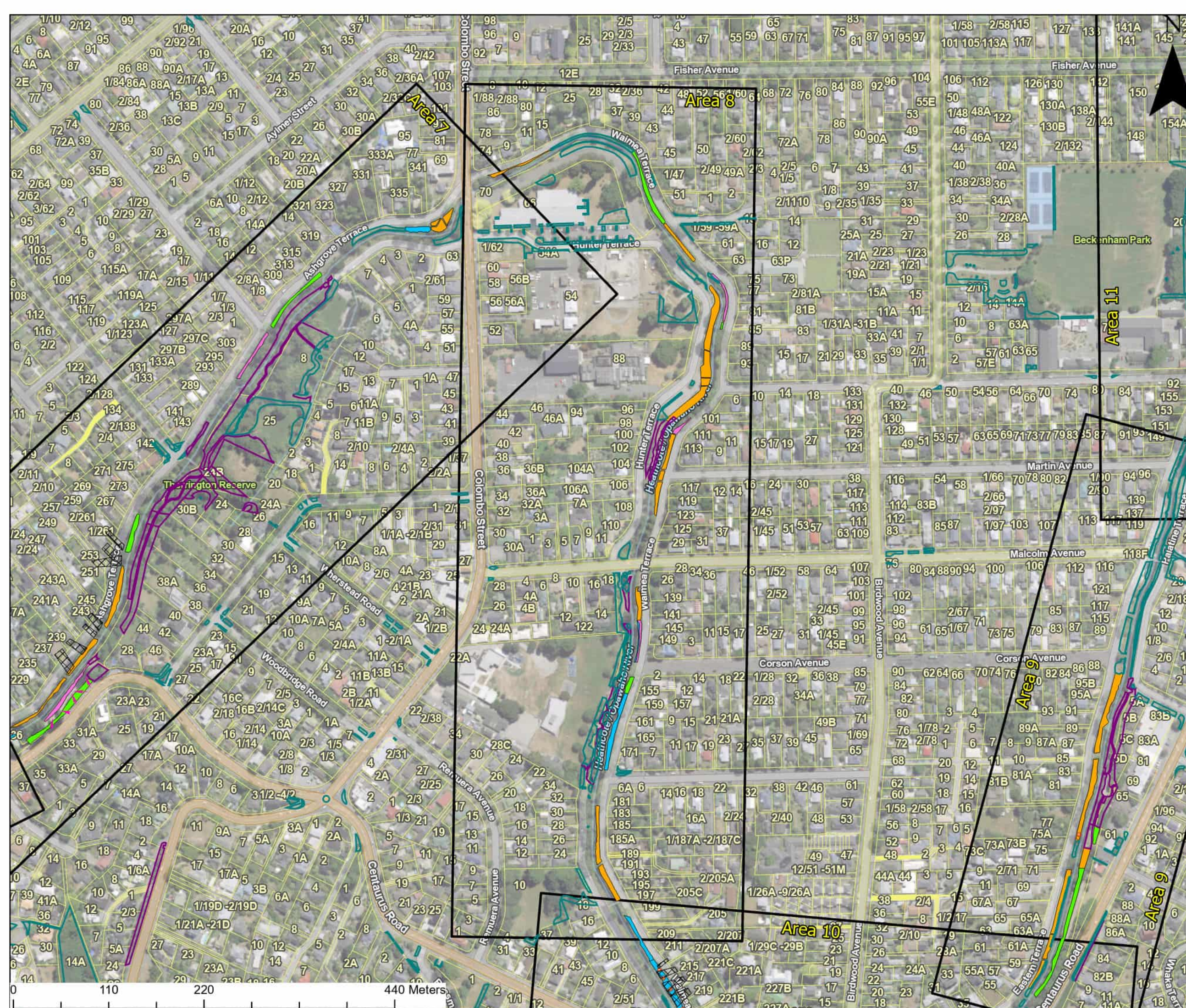
Ōpāwaho Heathcote River Draft Spatial Planting Plan

Area 7

Ashgrove Terrace
North (Barrington
Street to Colombo
Street)

Legend

- Existing Natural Area
 - Area
 - Open sightlines to river
 - Property Viewshaft
 - Specimen Tree
 - Park Area
 - Existing Planting Areas
- ### Plant Group Types
- A - Low planting
 - B - Low planting & shrubs
 - C - Forest mix
 - D - Low planting and canopy trees



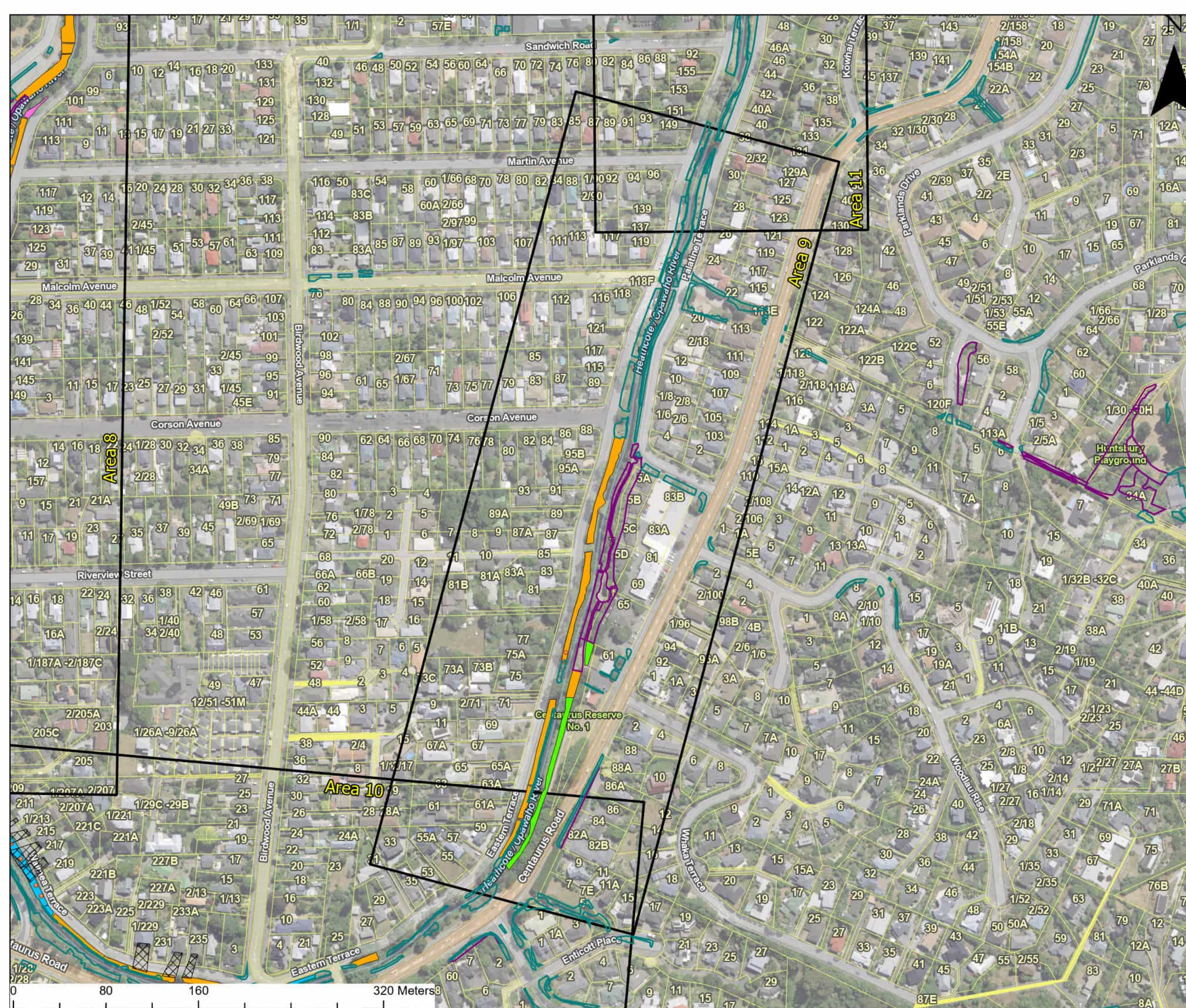
Opāwaho Heathcote River Draft Spatial Planting Plan

Area 8

Hunter Terrace / Waimea Terrace

Legend

- Existing Natural Area
 - Area
 - Open sightlines to river
 - Property Viewshaft
 - Specimen Tree
 - Park Area
 - Existing Planting Areas
- ### Plant Group Types
- A - Low planting
 - B - Low planting & shrubs
 - C - Forest mix
 - D - Low planting and canopy trees



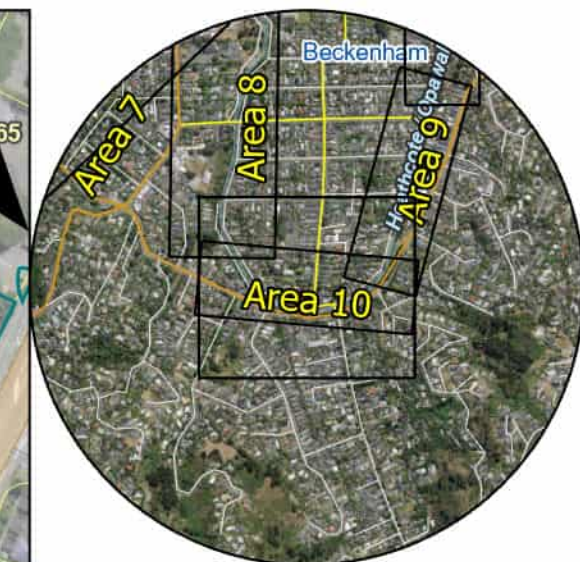
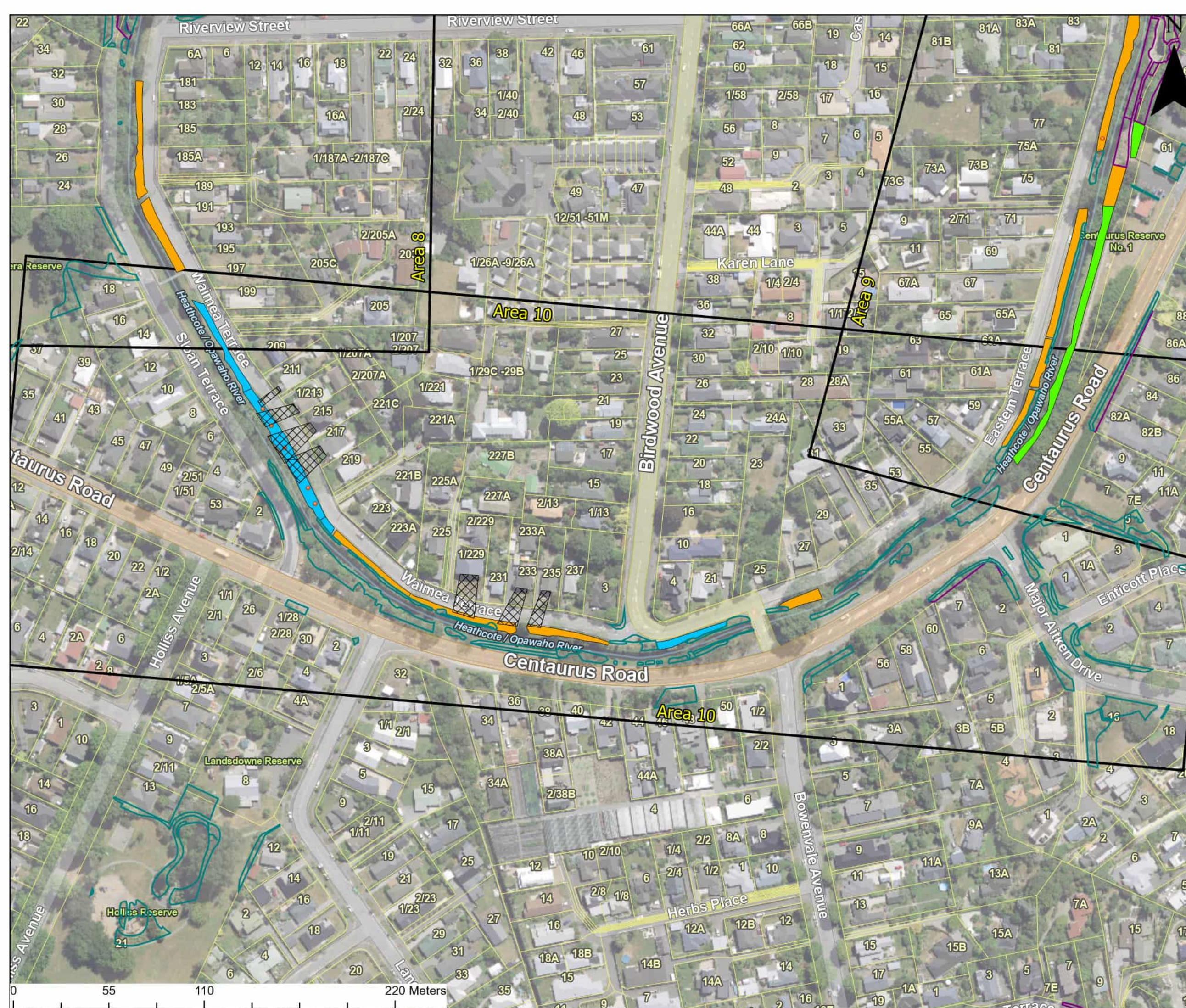
Ōpāwaho Heathcote River Draft Spatial Planting Plan

Area 9

Centaurus Reserve No. 1 / Farnley Reserve / Eastern Terrace

Legend

- Existing Natural Area
 - Area
 - Open sightlines to river
 - Property Viewshaft
 - Specimen Tree
 - Park Area
 - Existing Planting Areas
- Plant Group Types**
- A - Low planting
 - B - Low planting & shrubs
 - C - Forest mix
 - D - Low planting and canopy trees



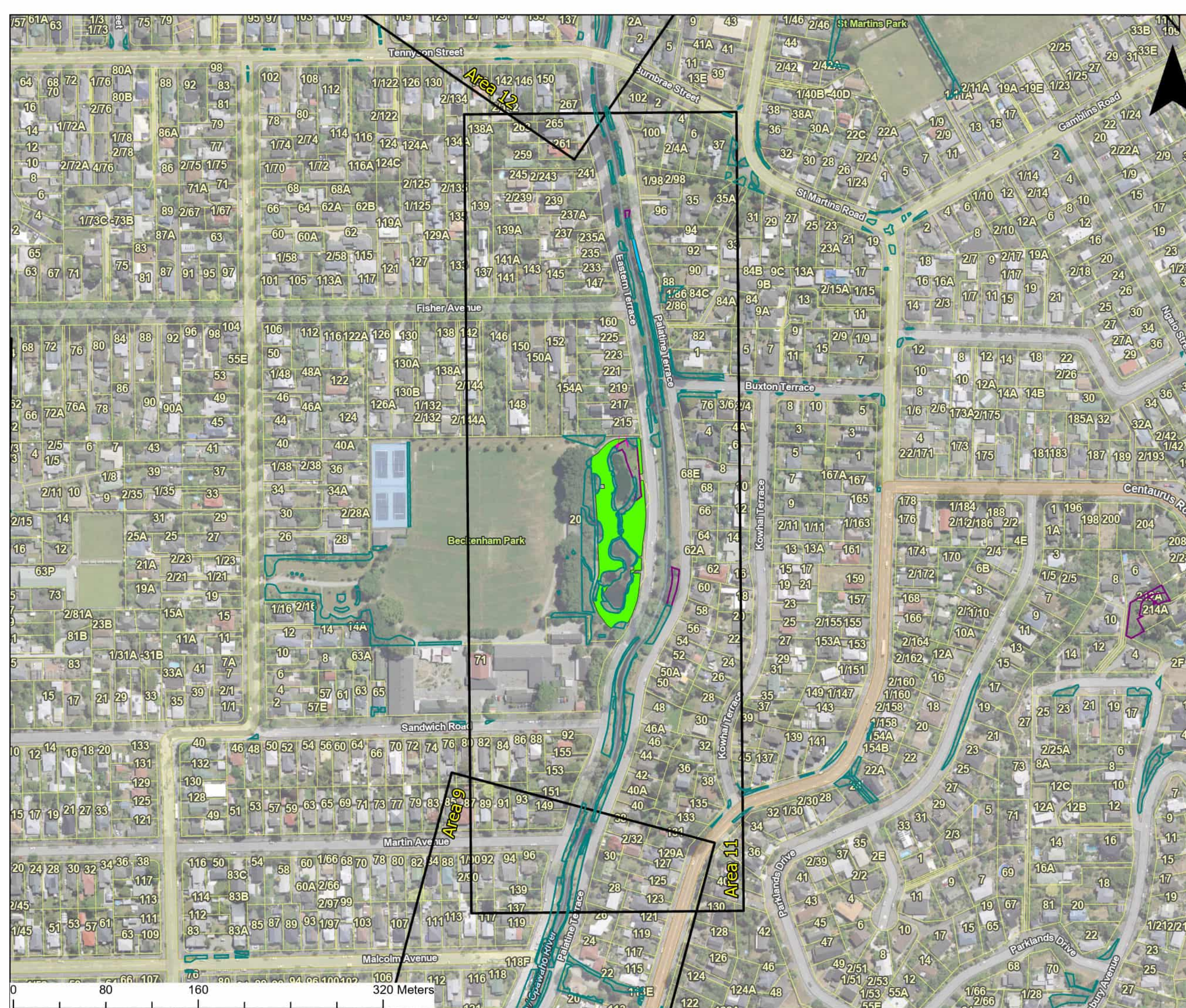
Ōpāwaho Heathcote River Draft Spatial Planting Plan

Area 10

Waimea Terrace

Legend

- Existing Natural Area
 - Area
 - Open sightlines to river
 - Property Viewshaft
 - Specimen Tree
 - Park Area
 - Existing Planting Areas
- Plant Group Types**
- A - Low planting
 - C - Forest mix
 - D - Low planting and canopy trees



Opāwaho Heathcote River Draft Spatial Planting Plan

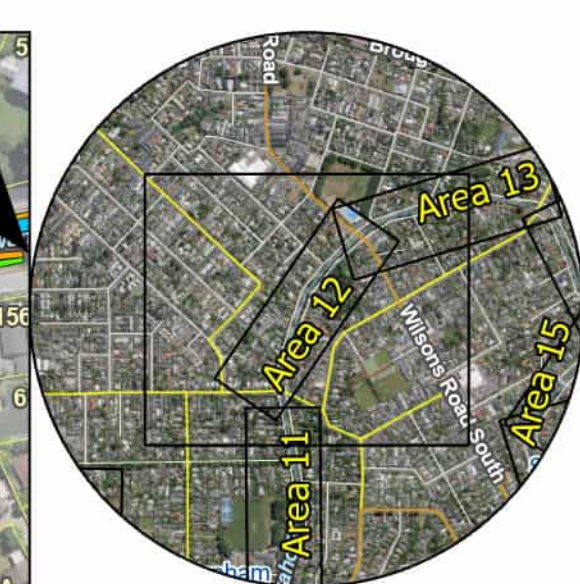
Area 11
Beckenham Ponds

Legend

- Existing Natural Area
- Area
- Open sightlines to river
- Property Viewshaft
- Specimen Tree
- Park Area
- Existing Planting Areas

Plant Group Types

- A - Low planting
- C - Forest mix



Ōpāwaho Heathcote River Draft Spatial Planting Plan

Area 12

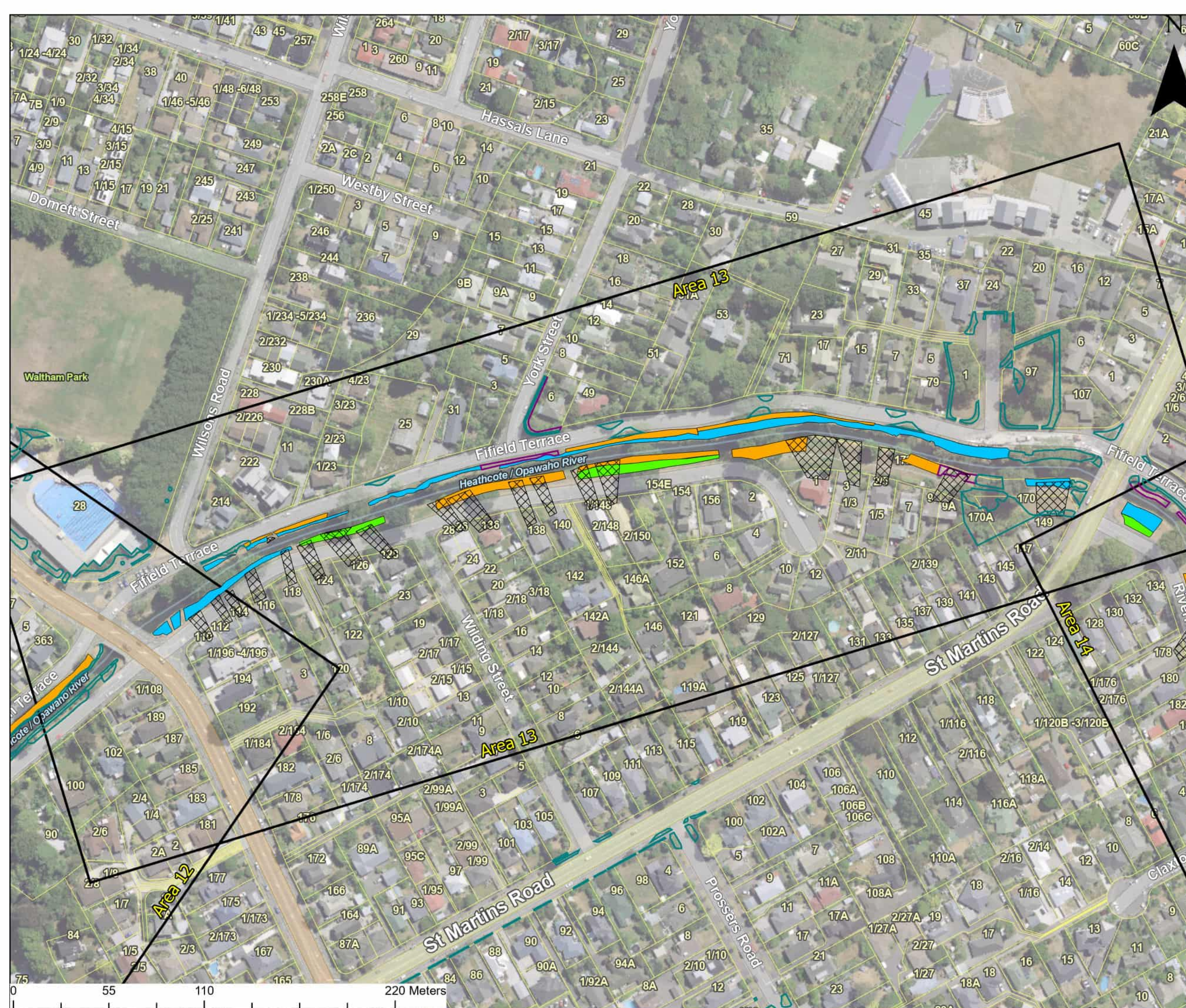
Eastern Terrace /
Riverlaw Terrace
(Tennyson Street to
Wilson Road)

Legend

- Existing Natural Area
- Area
- Open sightlines to river
- Property Viewshaft
- Specimen Tree
- Park Area
- Existing Planting Areas

Plant Group Types

- A - Low planting
- C - Forest mix
- D - Low planting and canopy trees



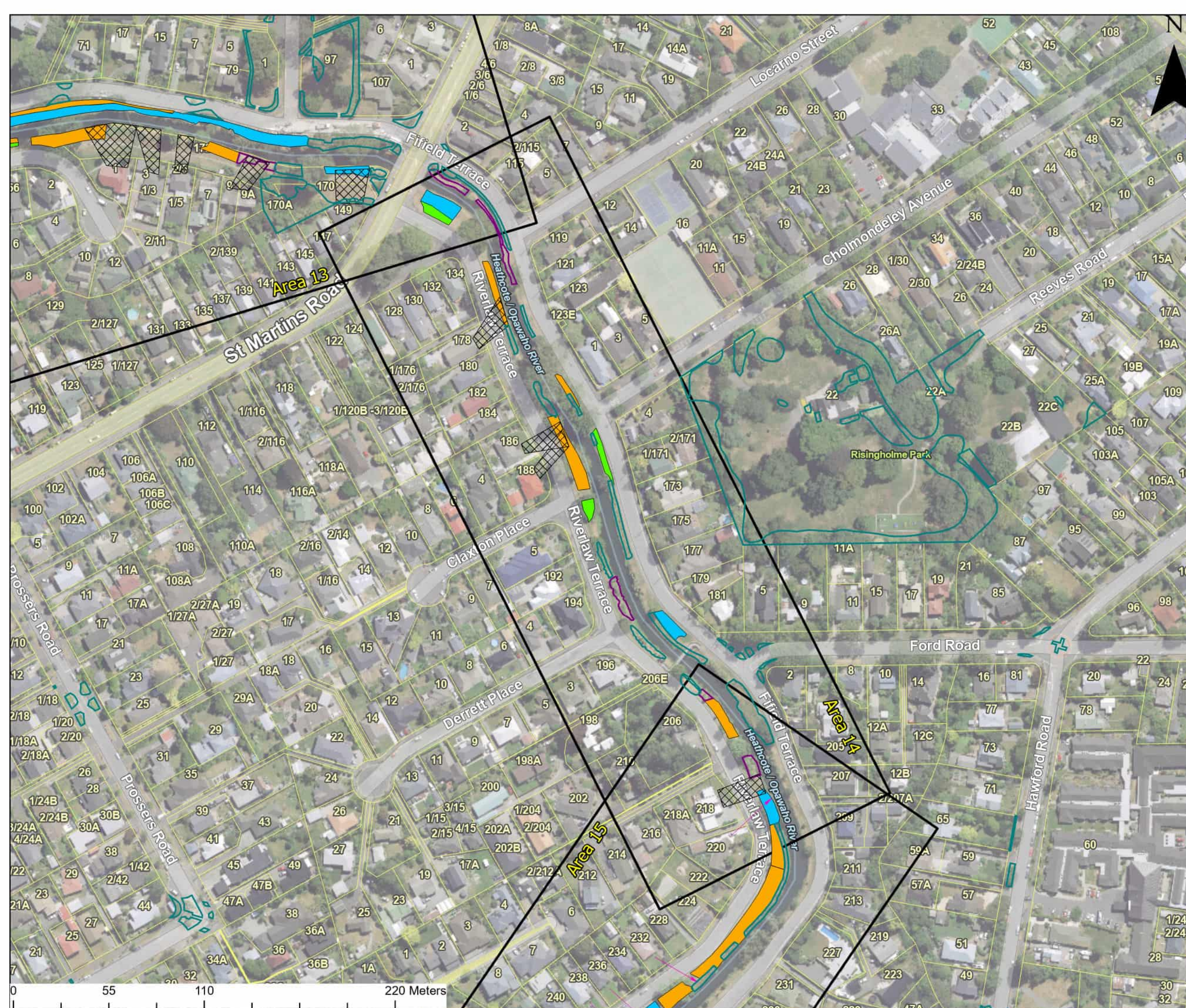
Ōpāwaho Heathcote River Draft Spatial Planting Plan

Area 13

Fifiel Terrace /
Riverlaw Terrace
(Waltham Road to
Ensors Road)

Legend

- Existing Natural Area
 - Area
 - Open sightlines to river
 - Property Viewshaft
 - Specimen Tree
 - Park Area
 - Existing Planting Areas
- Plant Group Types**
- A - Low planting
 - C - Forest mix
 - D - Low planting and canopy trees



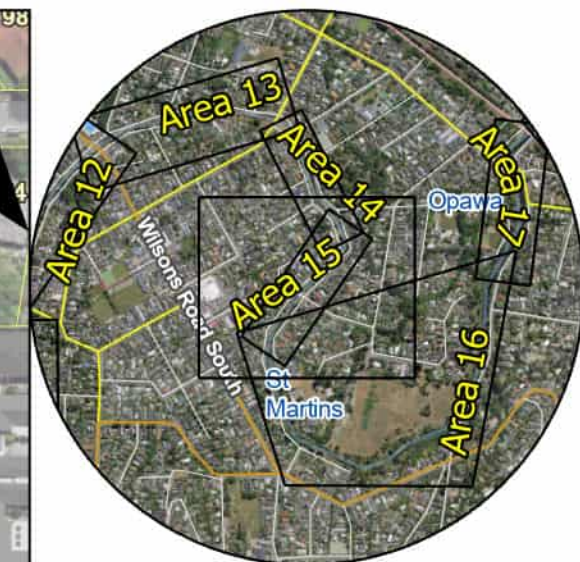
Opāwaho Heathcote River Draft Spatial Planting Plan

Area 14

Riverlaw Terrace Central

Legend

- Existing Natural Area
 - Area
 - Open sightlines to river
 - Property Viewshaft
 - Specimen Tree
 - Park Area
 - Existing Planting Areas
- Plant Group Types**
- A - Low planting
 - C - Forest mix
 - D - Low planting and canopy trees



Opāwaho Heathcote River Draft Spatial Planting Plan

Area 15

Riverlaw Terrace South

Legend

- Existing Natural Area
 - Area
 - Open sightlines to river
 - Property Viewshaft
 - Specimen Tree
 - Park Area
 - Existing Planting Areas
- Plant Group Types**
- A - Low planting
 - B - Low planting & shrubs
 - D - Low planting and canopy trees

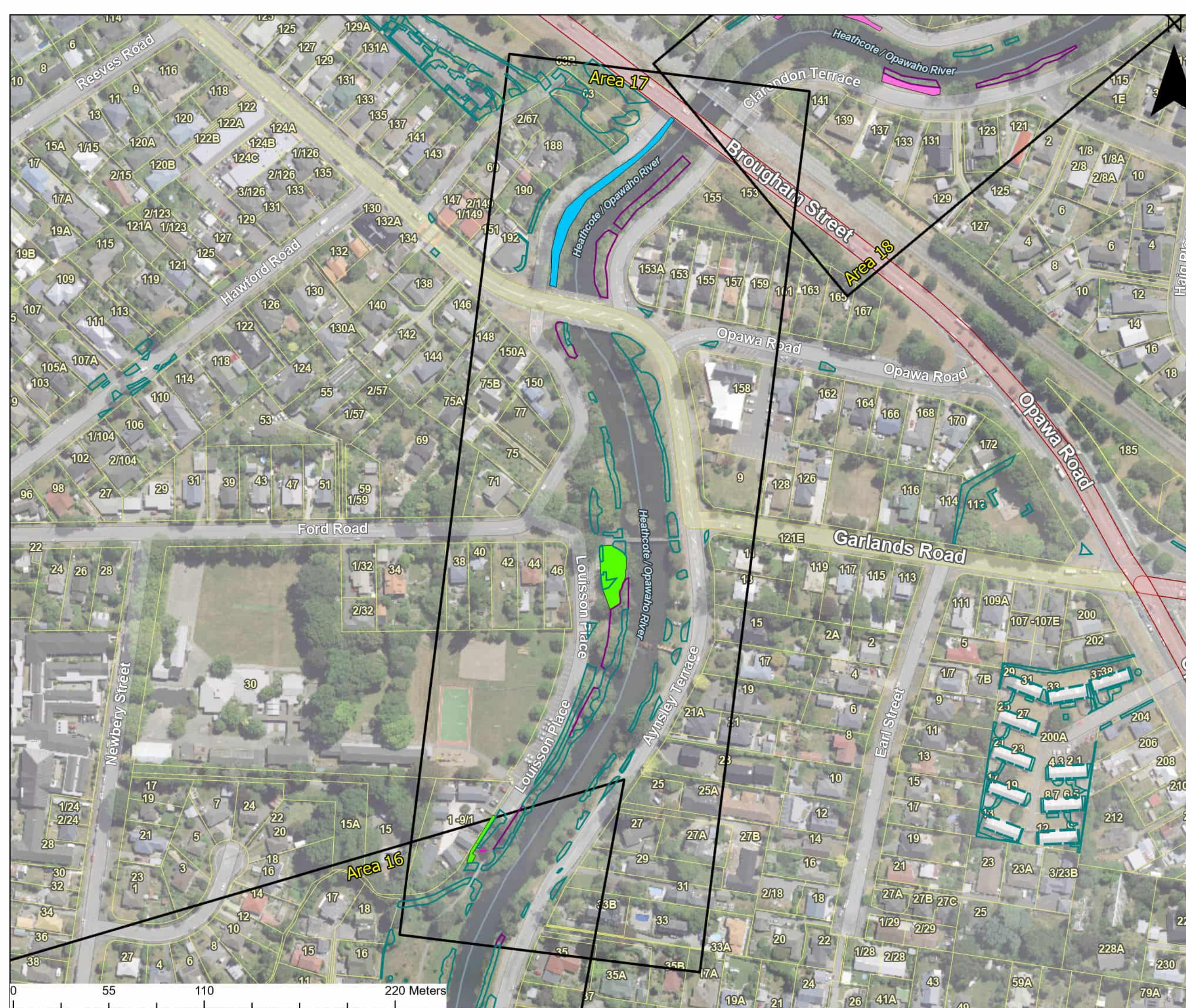


Opāwaho Heathcote River Draft Spatial Planting Plan

Area 16
Hansens Park

Legend

- Existing Natural Area
 - Area
 - Open sightlines to river
 - Property Viewshaft
 - Specimen Tree
 - Park Area
 - Existing Planting Areas
- Plant Group Types**
- A - Low planting
 - B - Low planting & shrubs
 - C - Forest mix
 - D - Low planting and canopy trees



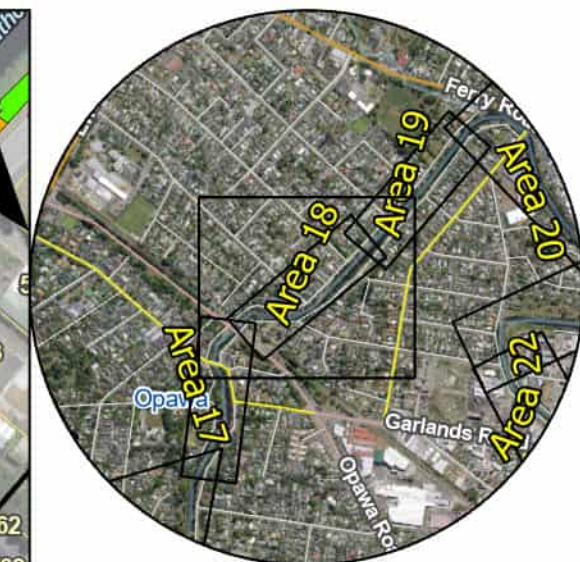
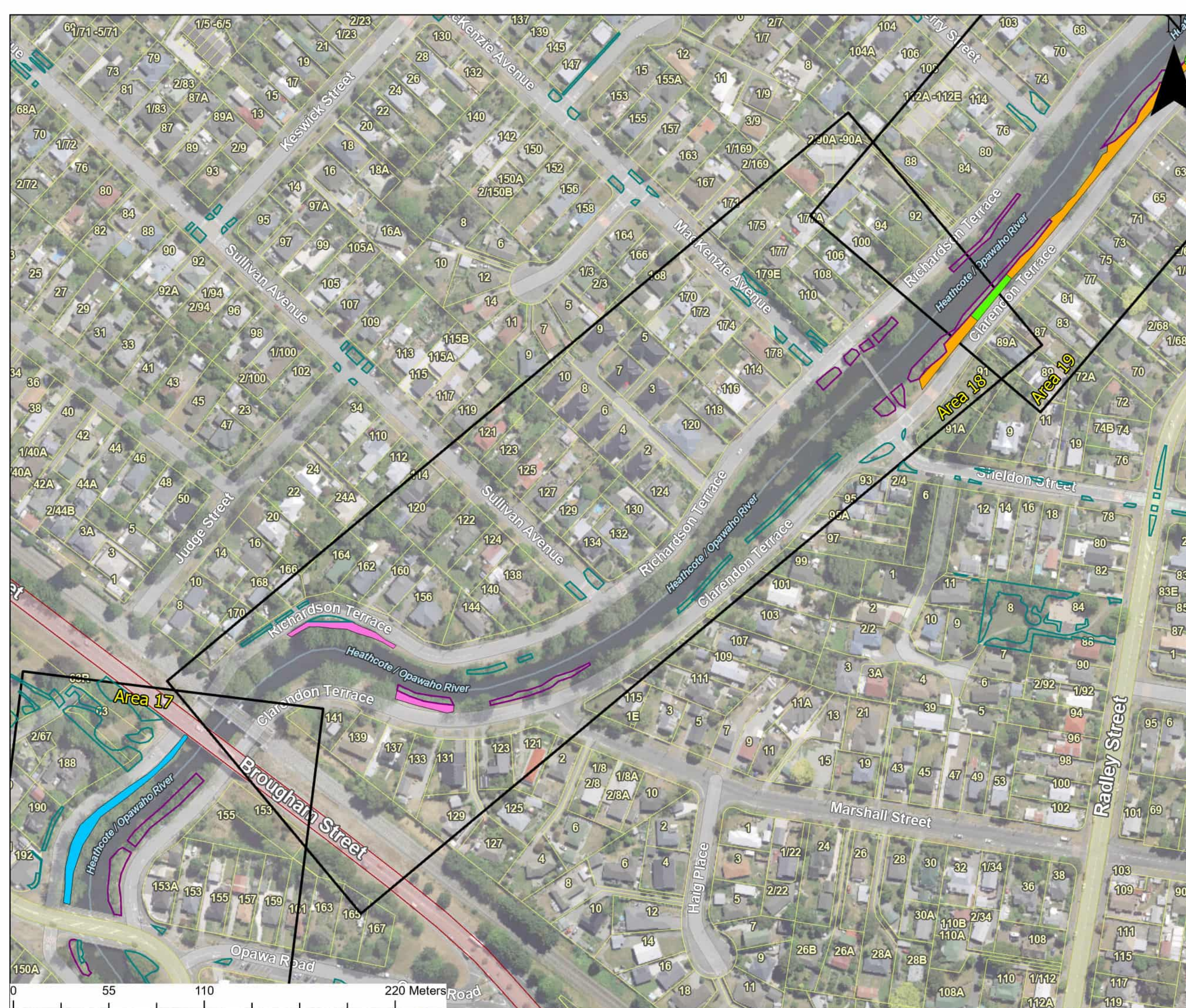
Opāwaho Heathcote River Draft Spatial Planting Plan

Area 17

Louisson Place

Legend

- Existing Natural Area
 - Area
 - Open sightlines to river
 - Property Viewshaft
 - Specimen Tree
 - Park Area
 - Existing Planting Areas
- Plant Group Types
- A - Low planting
 - B - Low planting & shrubs
 - C - Forest mix



Ōpāwaho Heathcote River Draft Spatial Planting Plan

Area 18

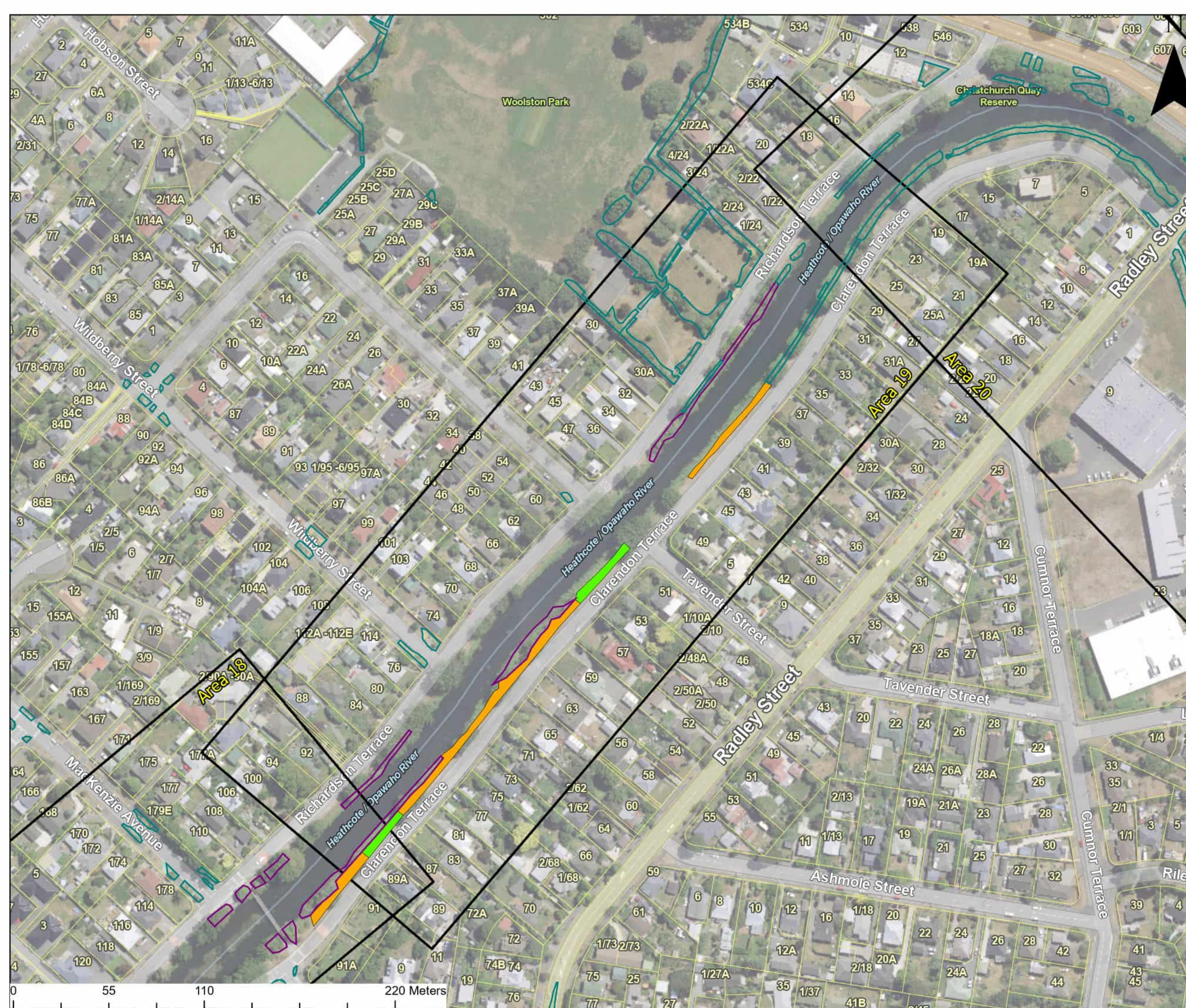
Clarendon Terrace /
Richardson Terrace

Legend

- Existing Natural Area
- Area
- Open sightlines to river
- Property Viewshaft
- Specimen Tree
- Park Area
- Existing Planting Areas

Plant Group Types

- A - Low planting
- B - Low planting & shrubs
- C - Forest mix
- D - Low planting and canopy trees



Ōpāwaho Heathcote River Draft Spatial Planting Plan

Area 19

Clarendon Terrace
(near Tavender Street)

Legend

- Existing Natural Area
 - Area
 - Open sightlines to river
 - Property Viewshaft
 - Specimen Tree
 - Park Area
 - Existing Planting Areas
- Plant Group Types**
- C - Forest mix
 - D - Low planting and canopy trees



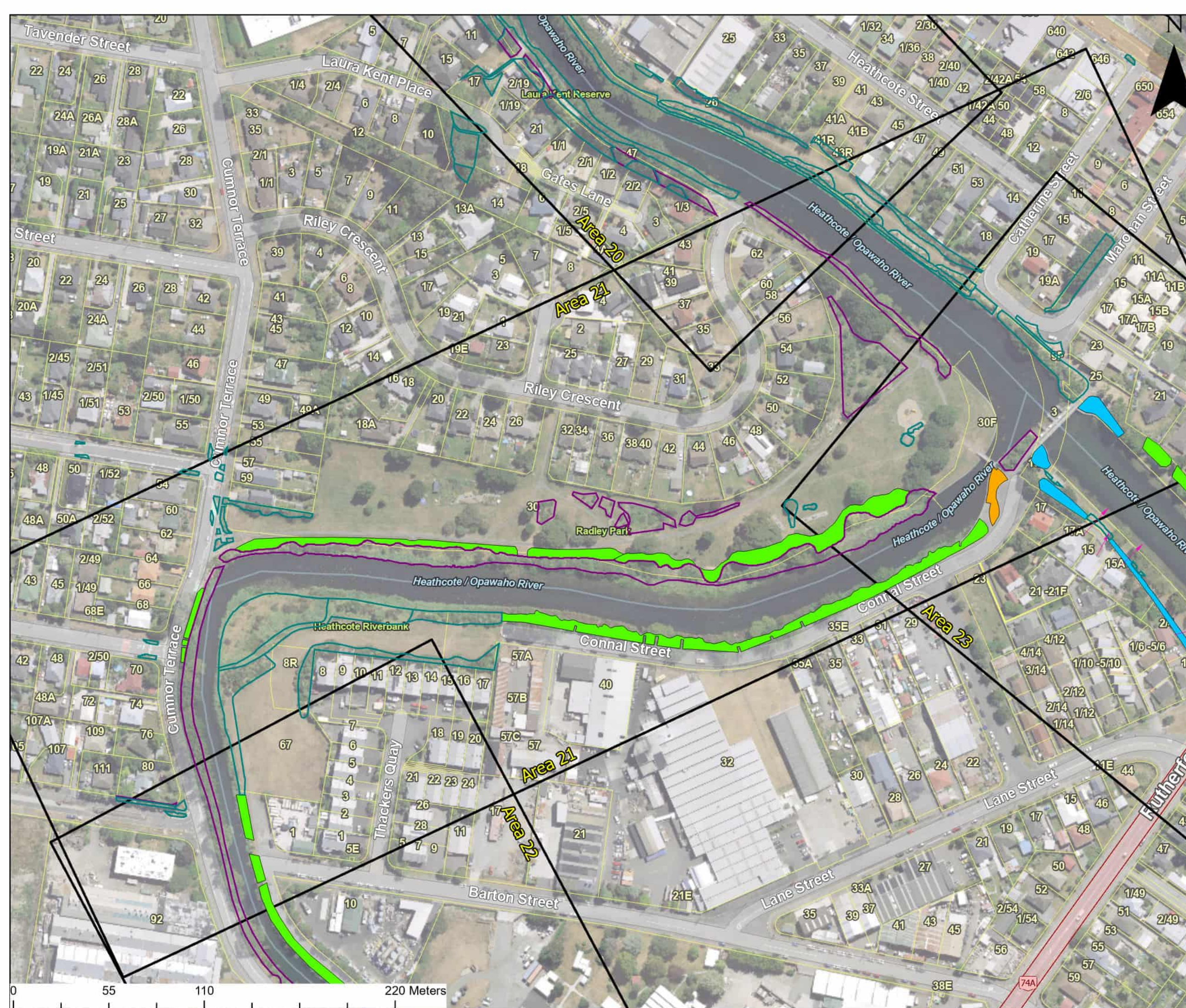
Ōpāwaho Heathcote River Draft Spatial Planting Plan

Area 20

Laura Kent Reserve

Legend

- Existing Natural Area
 - Area
 - Open sightlines to river
 - Property Viewshaft
 - Specimen Tree
 - Park Area
 - Existing Planting Areas
- Plant Group Types**
- A - Low planting
 - C - Forest mix
 - D - Low planting and canopy trees

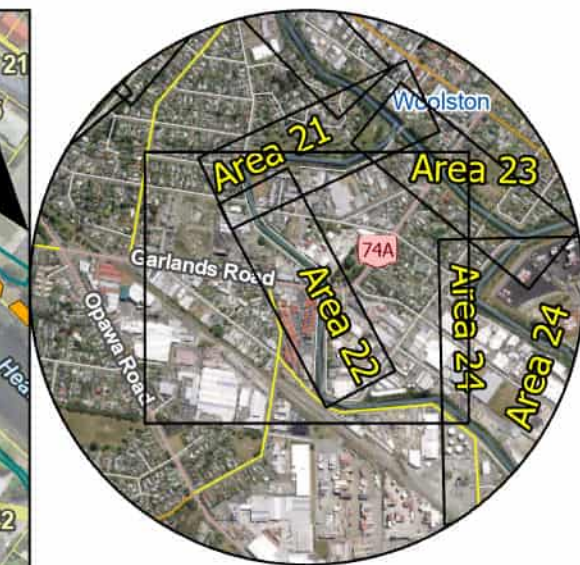
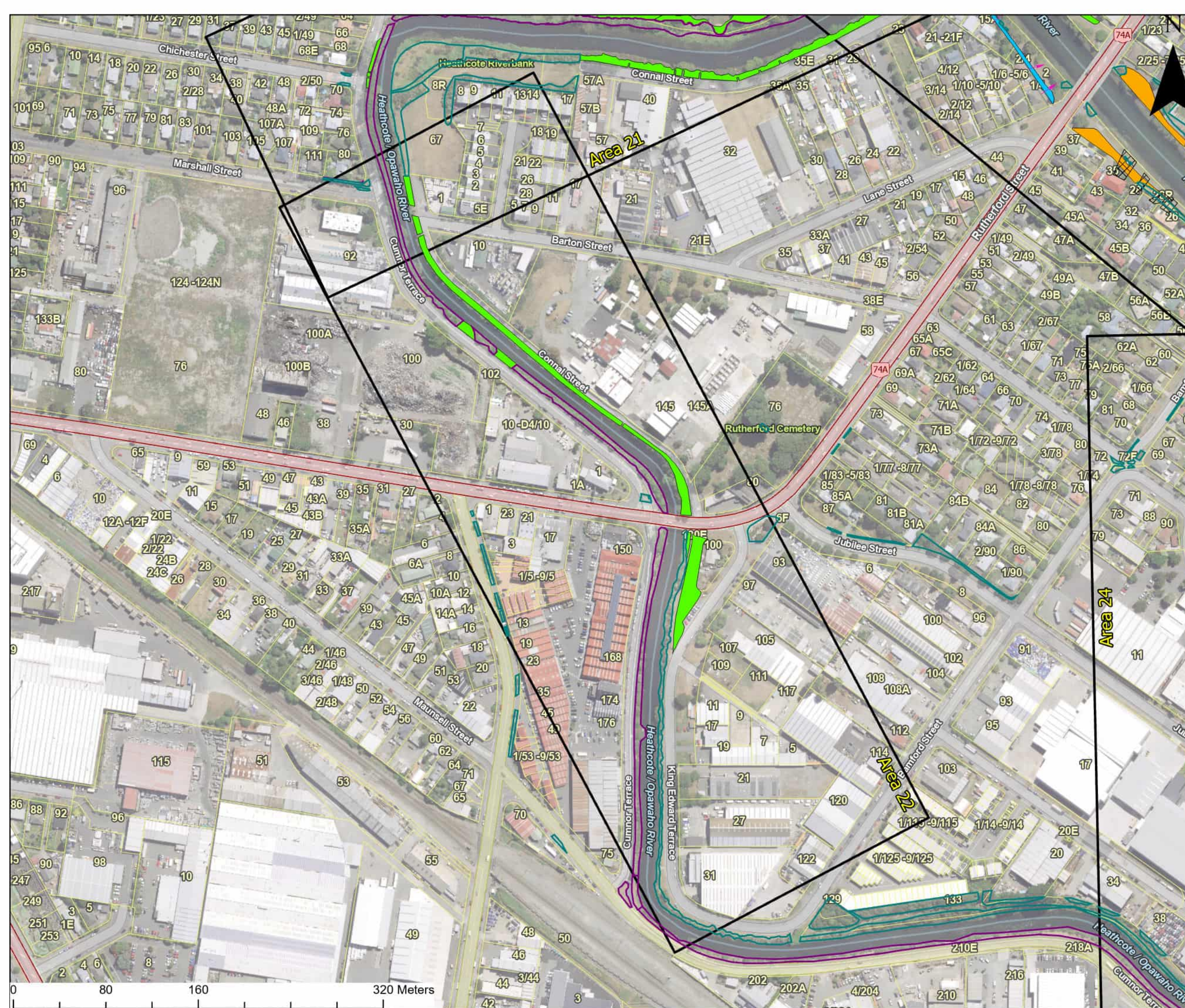


Ōpāwaho Heathcote River Draft Spatial Planting Plan

Area 21
Radley Park

Legend

- Existing Natural Area
 - Area
 - Open sightlines to river
 - Property Viewshaft
 - Specimen Tree
 - Park Area
 - Existing Planting Areas
- Plant Group Types**
- A - Low planting
 - C - Forest mix
 - D - Low planting and canopy trees



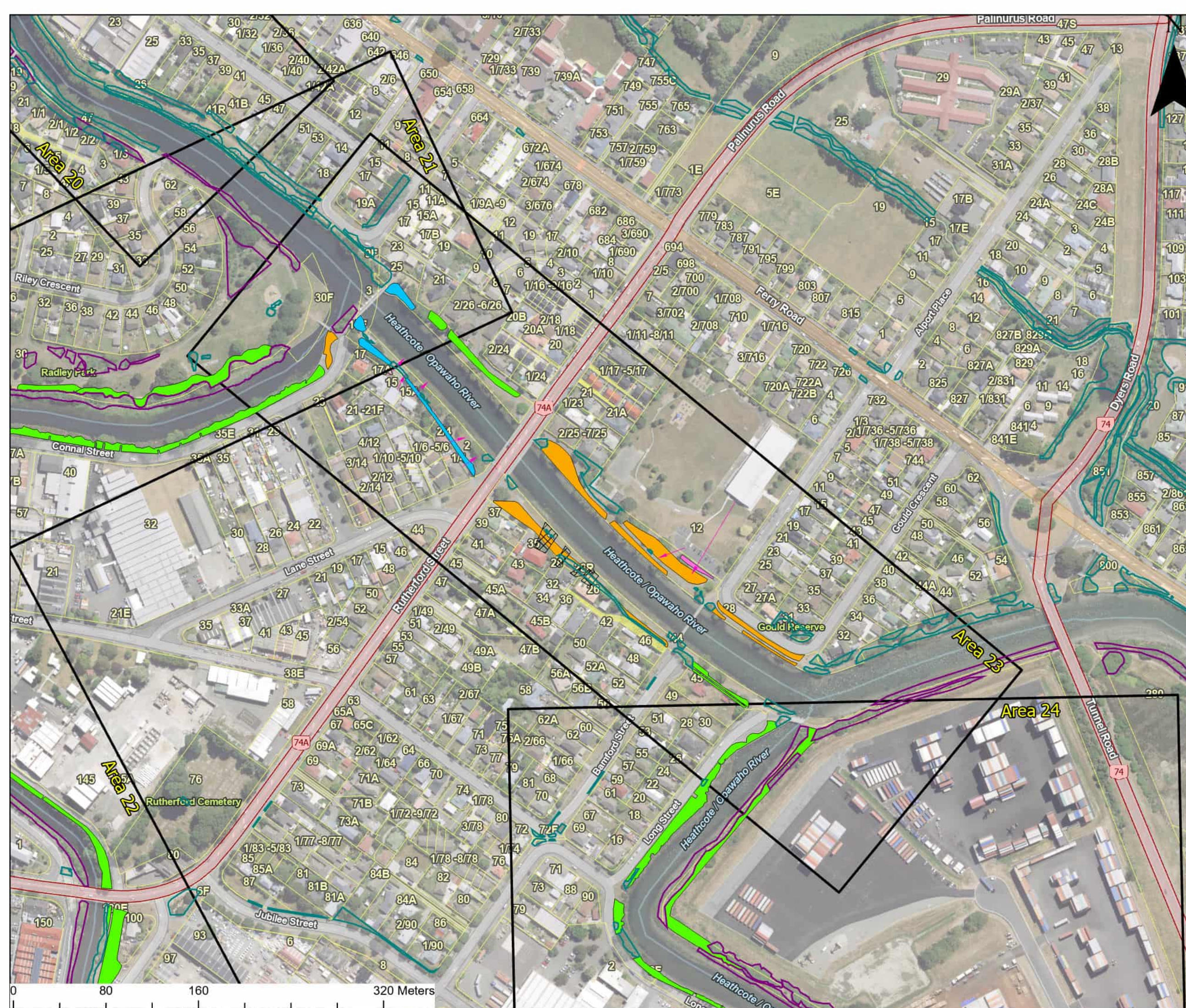
Ōpāwaho Heathcote River Draft Spatial Planting Plan

Area 22

Woolston Loop (Connal
Street, Cumnor
Terrace)

Legend

- Existing Natural Area
 - Area
 - Open sightlines to river
 - Property Viewshaft
 - Specimen Tree
 - Park Area
 - Existing Planting Areas
- Plant Group Types**
- A - Low planting
 - C - Forest mix
 - D - Low planting and canopy trees

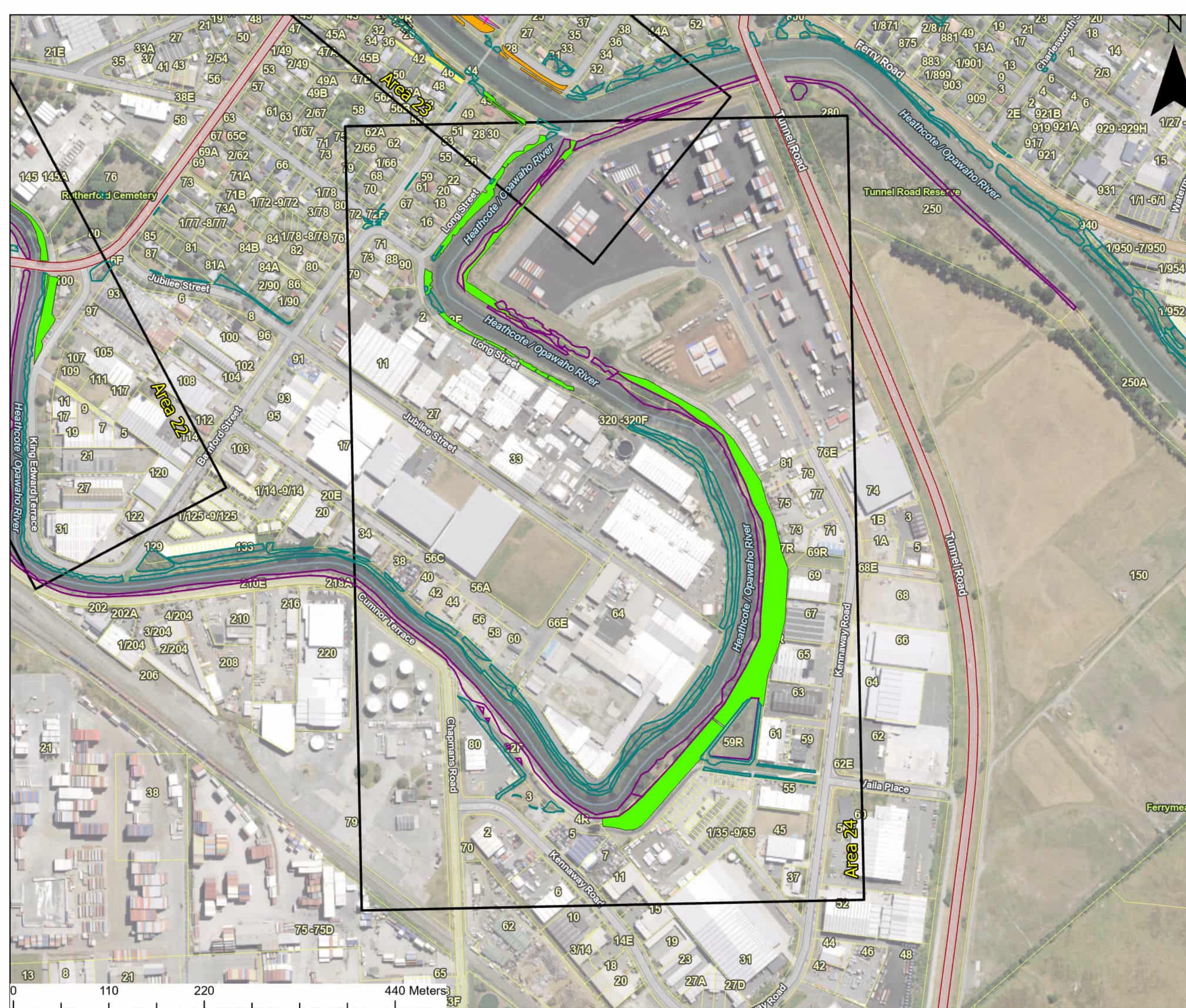


Ōpāwaho Heathcote River Draft Spatial Planting Plan

Area 23
The Cut

Legend

- Existing Natural Area
 - Area
 - Open sightlines to river
 - Property Viewshaft
 - Specimen Tree
 - Park Area
 - Existing Planting Areas
- ### Plant Group Types
- A - Low planting
 - B - Low planting & shrubs
 - C - Forest mix
 - D - Low planting and canopy trees



Ōpāwaho Heathcote River Draft Spatial Planting Plan

Area 24

Woolston Loop /
Kennaway Reserve

Legend

- Existing Natural Area
 - Area
 - Open sightlines to river
 - Property Viewshaft
 - Specimen Tree
 - Park Area
 - Existing Planting Areas
- Plant Group Types**
- B - Low planting & shrubs
 - C - Forest mix
 - D - Low planting and canopy trees