

# PART FOUR: THE PROPOSAL

The following plans provide a foundation for future planning, indicating concepts for future design work.

PLANS 1-15 - Pages 50 - 79 CROSS SECTIONS A-H - Pages 80 - 87

# THE PROPOSAL **LEGEND**



Existing tree to be retained



<u>Proposed trees</u> Exotic or indigenous species greater than 15m at maturity planted in river banks wider than 8m (refer Appendix)





Proposed trees Exotic or indigenous species less than 15m at maturity planted in river banks narrower than 8m (refer Appendix)

Low growing river margin planting allowing views of water and providing habitat linkages



Open areas of maintained grass

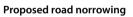


Proposed asphalt or grit pedestrian or shared cycle / pedestrian paths

Existing riverbank footpaths



Existing road edge, footpaths on residential side to be retained





Intersection build-outs for traffic management Incorporating low shrub planting, street tree planting and feature paving



Existing canoe launching ramps

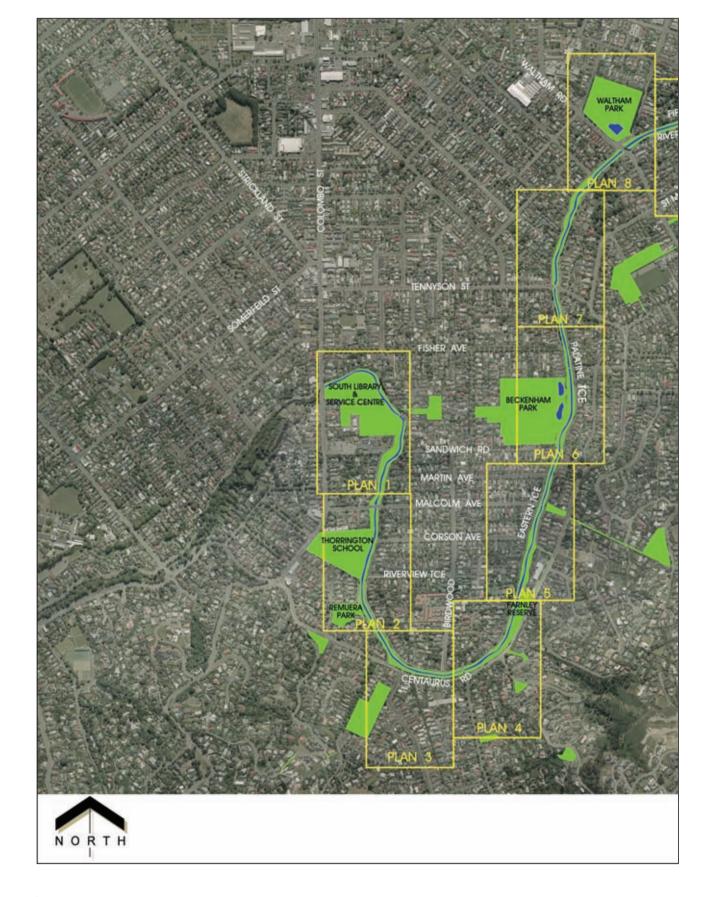


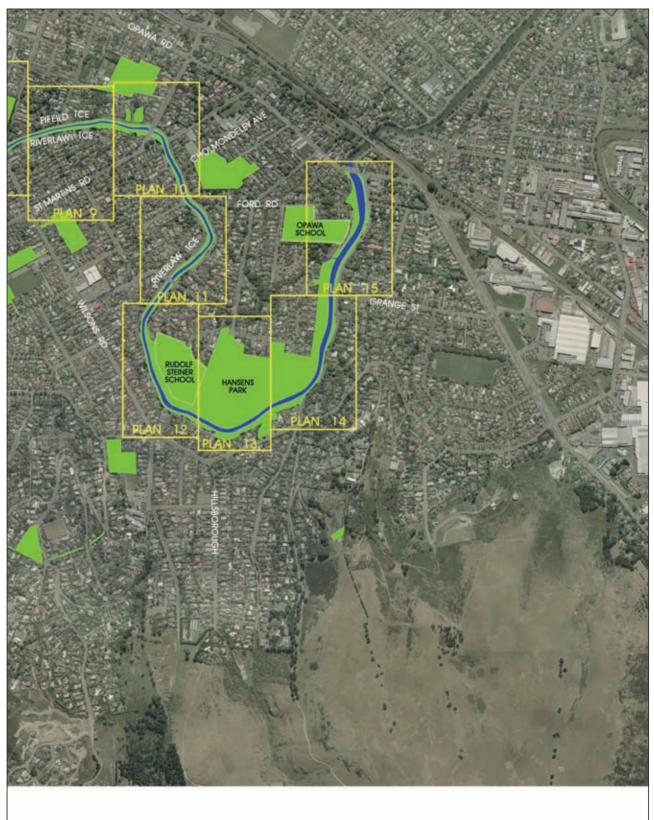
Proposed river access points eg. steps, beach, ramps or landings at approximately 200m apart each slde of the river

Active wells



Car parking areas





### PLAN LOCATION DIAGRAM

# THE PROPOSAL COLOMBO STREET TO MARTIN AVE

#### PLAN 1 OF 15

- Colombo St Bridge. A 'single sided' bridge, (1)once known as "Latter's Bridge." (Cashmere Spur used to be named Latter's Spur after the farm that was located there). The river was first bridged here in 1863. Opportunities to incorporate colour, lighting, interpretation and integrated art to the bridge as part of the overall consistent approach to built elements along the mid-Heathcote.
- (2)

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Old Dam site. Opportunities exist here for a new path and steps down to water.

- The existing Graham Bennett artwork 'Engage' to be extended to connect with the river as originally proposed.
- Riffle section of rapidly flowing water is to be (4) retained as an important spawning area for brown trout and habitat for the native bluegill bully. There is another riffle downstream towards Malcolm Avenue. Riffles to be maintained and protected, and opportunities explored for educational interpretation.
- 5 Possible area for planting of flax (harakeke) for gathering and weaving.
  - Existing storm water detention pond which treats runoff from the Library car park area may be extended to the river.
    - Proposed new footbridge to enhance linkages and possible future replacement for existing footbridae.
  - Hunter Terrace road closure. The old Hunter Terrace has already been legally closed. The new entrance to the Library car park from Colombo Street now constitutes Hunter Terrace. Old existing seal to be removed and replaced with grass and trees and paths.

- Pipeyards. This proposal involves removing the pipeyards to create a new reserve incorporating active wells, tennis court, new paths, and an enhanced BMX area. Old disused wells to be capped. Existing garage building to be relocated off site.
- (10)

Existing Hunter Terrace carriageway to be raised and cobbled to calm traffic.

- Blue Stone Track. The old name for the link (11)from the Cashmere Club to Colombo St before Hunter Terrace was built. The name came from the blue coloured by-product from the gas works which was used along here to suppress weeds. Where possible reduce road width to minimum of 6 metres to allow formalised parallel car parking, sealed path and river bank enhancement.

(14)

(16)

Car parking (10-12 bays) on existing carriageway.

- (13)Old seal from existing car park area to be removed and replaced with grass, trees, pathway and access to the water.
  - Single slow lane 4m wide and maximum 60m long.



- Single slow lane between cul de sacs.
- Intersection between Hunter Terrace and Colombo Street to be upgraded to ensure safe access and egress.



# THE PROPOSAL MALCOLM AVE TO REMUERA RESERVE

#### PLAN 2 OF 15

(2)

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- 1 Malcolm Ave bridge. Large rocks have been placed below the bridge to allow for a future walkway link under the bridge. There is an area of seating here. Good pedestrian access to the river is available via macrocarpa sleeper steps, large basalt boulders and cobblestone paving.
  - A riffle area downstream of Malcolm Avenue bridge is to be retained as it is important for instream life and oxygenating the water. Opportunities to be explored for educational interpretation.
- 3 The Donkey Track. A 1.2m wide asphalt path meanders past substantial native planting with some grassed 'clearings' and picnic tables bordering Thorrington School. There is a small jetty river access with associated painted poupou. Planting to be maintained to ensure safety for users and views of the river.
  - **Remuera Reserve**. Contains a children's playground and connections through Remuera Avenue.
- 5 A flat run of river flow here may have sufficient gradient to form a riffle either side of the foot bridge. This would create some hydraulic variation and new rocky material, with emergent rocks, could provide breeding sites for instream invertebrates.

- 6 The existing pedestrian footbridge provides opportunities to incorporate colour, lighting, interpretation and integrated art as part of the overall consistent approach to built elements along the mid-Heathcote.
  - The steepness of the bank adjacent to Sloan Terrace means there is little opportunity to reduce road width or provide a new path on the riverbank. However the road edge could be better defined to minimise "road creep" and the apparent steepness of the bank could be reduced by the creation of low terraces.

(7)

52 Mid-Heathcote River/Öpawaho Linear Park Masterplan: 2009



# THE PROPOSAL SLOAN TCE TO BIRDWOOD AVE

#### PLAN 3 OF 15

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This is an important Waitaha site, the use and extent of which needs to be clarified.

- 2 The steepness of the bank adjacent to Sloan Terrace means there is little opportunity to reduce road width or provide a new path on the riverbank. However the road edge could be better defined to minimise "road creep" and the apparent steepness of the bank could be reduced by the creation of low terraces.
- 3 An existing formed path links Sloan Terrace with Farnley Reserve. Existing established native vegetation provides good habitat linkages and shading for the water, however requires regular maintenance.
- 4 A flat run of river flow here between Riverview and Birdwood Avenues may benefit from the addition of new rocky material and emergent rocks to provide some hydraulic variation and breeding sites for instream invertebrates.

- 5 Where possible reduce road width to minimum of 6 metres to allow formalised parallel car parking, sealed path and river bank enhancement.
- 6 Existing native planting requires regular maintenance to provide safety along the Crime Prevention Through Environmental Design (CPTED) principles.



# THE PROPOSAL BOWENVALE AVE TO WHAKA TCE

#### PLAN 4 OF 15

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Existing reserve area between Centaurus Road and river. Retain existing sealed shared walkway to Centaurus Road shops and create new pathway along top of bank to Farnley Reserve.

Opportunities exist for road narrowing and formalising of parallel parking bays to protect the riverbank from vehicle damage. Provide river access adjacent to some car park areas if bank steepness and location of existing trees allow.

Bowenvale Bridge. The original swivel span from the 1864 Ferrymead Bridge. Stephenson was the manufacturer of this steel "swing bridge" who had a connection with the company who built the first steam train - the "Rocket" (Stephenson who built the Rocket was his grandfather). The bridge span was uplifted and taken from Ferrymead to Swanns Road in Dallington. It was finally brought to its present site in 1955 and shortened to 35 feet long. It was strengthened to take buses and a footbridge was added in 1986. Opportunities exist to incorporate colour, lighting interpretation or integrated art as part of the overall consistent approach to built elements along the mid-Heathcote.



# THE PROPOSAL CENTAURUS RD SHOPPING CENTRE TO MARTIN AVE

(7)

#### PLAN 5 OF 15

(5)

- 1 Malcolm Avenue to Martin Avenue. Single slow lane 4m wide and maximum 60m long with parking bays. This section of riverbank could be significantly enhanced with pedestrian/cycle access, regraded banks, additional planting around the footbridge and jetty access to the waters edge.
- 2 Protect and enhance existing riffle sections as brown trout spawning habitat by adding additional substrate material to the river bed (and regularly removing sediments).
- 3 Reduce road width at Palatine Reserve with kerb extension to slow traffic and improve pedestrian access to the Malcolm Avenue Bridge and proposed jetty access.
- 4 Originally the site of a ford river crossing used to carry bricks from the Farnley Brickworks in to the Beckenham Loop area. Prior to 1937 the banks were approximately 1 metre lower resulting in flooding and the merging of the ' ponds' area with the river itself. Potential to explore integrated art/interpretation opportunities.
  - Vary width of the long straight stretches of river by varying the thickness of bank vegetation in widened sections of the river to improve stream habitat values without compromising flood capacity.

- 6 Opportunities at the Corson Avenue intersection with Eastern Terrace include road narrowing to improve the potential for large tree planting, bank regrading, and jetty access to the river edge.
  - Where possible reduce road width to minimum of 6 metres to allow formalised parallel car parking, sealed path and river bank enhancement.
- 8 Farnley Reserve. Features jetty access to the river, seating, substantial native riparian planting and a bronze sculpture by artist Bing Dawe (sponsored by the Soroptimist International and Christchurch City Council).



# THE PROPOSAL SANDWICH RD TO FISHER AVE

#### PLAN 6 OF 15



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**Fisher Avenue/Eastern Terrace intersection.** Due to narrowness of the Eastern Tce river bank between Fisher Ave and Tennyson St the proposed river walkway should be directed across to the existing footpath on the residential side of the road.

Existing footbridge recently replaced the old timber footbridge. Opportunities to incorporate colour, lighting, interpretation and integrated art as part of the overall consistent approach to built elements along the mid-Heathcote.

Vary width of the long straight stretches of river by varying the thickness of bank vegetation and the planting of marginal vegetation in widened sections of the river to improve stream habitat values without compromising flood capacity.

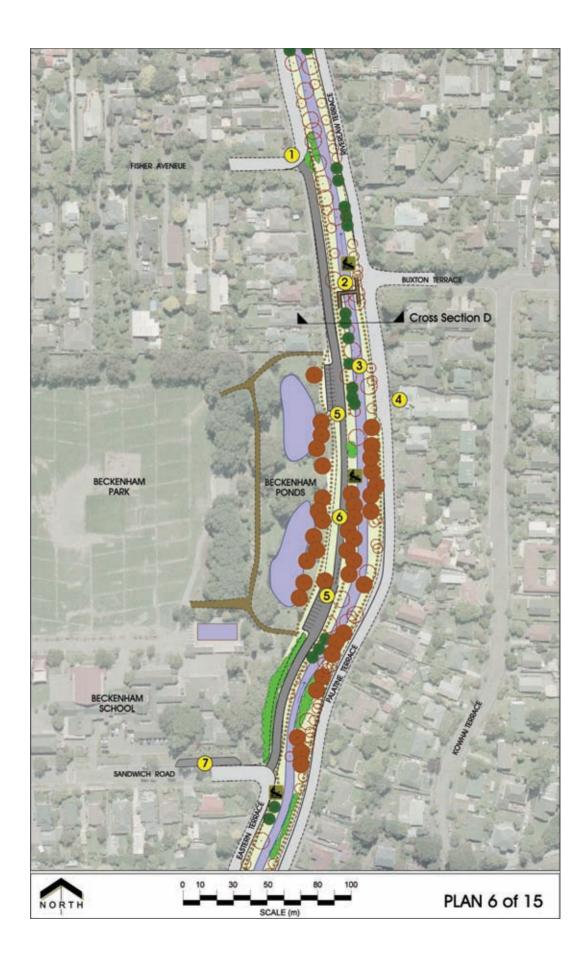
**Historic nursery site**. Part of Alfred Buxton's Nursery 1902-1925. This was initially known as "Premier Nursery", and later called the "Opawa Nursery". Alfred Buxton (1872-1950) was New Zealand's first Landscape Architect and the distinctive Arcadian style of the Beckenham Ponds layout on the other side of the Heathcote River/Ōpawaho may well have been influenced by him or designed by a colleague of his. There are potential opportunities to reflect this heritage in future design work and site interpretation. Vehicle turnaround areas. Carpark numbers and locations to be determined at detail design stage.

6 Single slow lane 3.5m wide and maximum 60m long. Gives opportunities to slow traffic and allows for safer access to the river edge. Also allows for large trees and river planting and designated pedestrian/cycle paths.



(5)

New bus bay/short term drop off area for school. Possibly also a car parking area when not required by bus.



# THE PROPOSAL TENNYSON ST TO HUME ST

#### PLAN 7 OF 15

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- Potential for road narrowing and/or formalising of parallel parking area with opportunities for bank regrading, a river access point, and river edge and large tree planting.
- Reducing the width of both Eastern Terrace and Riverlaw Terrace would provide significant opportunities for bank regrading, planting of large tree species, safer designated cycle and pedestrian paths, formalised car parking bays and safer river access points.
- 3 Steeper sections of river bank to be planted with low growing native plant species to ensure that views of the river can still be enjoyed by pedestrians and neighbours while establishing connective linkages along the banks.
  - Existing fast water riffle section is valuable bluegill bully habitat to be protected from siltation and improved if practicable. Planting of steeper sections of river bank and regrading where possible would minimise potential for erosion.

Potential for road narrowing and formalising of parallel parking area opposite the corner dairy with enhanced bank / river edge planting and river access on the Eastern Terrace side. The Tennyson St bridge, the upper most point of tidal influences on the river, provides opportunities to incorporate colour, lighting, interpretation or integrated art as part of the overall consistent approach to built elements along the mid-Heathcote.

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Bell Flax Mill and old dam site. Constructed in 1869, a water wheel was used but later removed due to flooding problems. Potential to explore integrated art/interpretation opportunities.



# THE PROPOSAL HUME ST TO WILSONS RD

#### PLAN 8 OF 15



Existing public pool, playground, half court basketball, public toilets, skate bowl and playing fields at Waltham Park.

- 2 The existing jetty provides access to the narrow grit path running along the river bank on the Fifield Terrace side. If the pedestrian bridge underpass is constructed, a new section of path would be required on the riverbank linking the underpass to the jetty.
- 3 The shallow fast water riffle area immediately downstream of the bridge could possibly be improved with additional substrate material to enhance invertebrate egg laying sites. Below this riffle the river becomes deeper and slower and would benefit ecologically by the planting of more overhanging and emergent vegetation along the river bank margin.
- 4 Wilsons Road bridge. Formerly known as 'Crawfords Bridge' when it linked both sides of Wilsons Road 50m downstream from its current position. Prior to the 1850's it consisted of a pair of totara logs used by early surveyors prior to settlement. Potential exists to develop pedestrian access under the bridge to provide an alternative means of crossing busy Waltham Road. Opportunities exist to incorporate colour, lighting, interpretation or integrated art as part of the overall consistent approach to built elements along the mid-Heathcote.

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Existing width of Eastern Terrace is overly wide. By reducing road width the potential exists for regrading the steeper parts of the river bank, including formalised 90° car parking, a seating/ paved area with river access, generous space for shared pedestrian/cycle path and extensive large tree and river edge planting.



# THE PROPOSAL WILDING ST TO ESHER PLACE

#### PLAN 9 OF 15



(2)

#### **Riverlaw Terrace/Wilding Street**

**intersection**. New kerb extensions and low planting to narrow the existing street widths and slow traffic.

Retain existing narrow grit path along Fifield Terrace riverbank. Replacement tree planting should recognise narrow bank widths. Additional low planting to bank would improve river values both aesthetically and ecologically while ensuring improved visibility of path users from Fifield Terrace and adjacent properties.

3

Existing wide grassed river bank provides opportunities for:

- new sealed shared pedestrian/cycle
   path linking to existing path,
- regrading of the river bank edge,
- the retention of existing healthy large trees and the planting of additional large trees, and
- the retention of large areas of open lawn with safer easy access to the waters edge.



Along the edges of the deeper sections of the river, marginal or semi aquatic vegetation could be planted to create enhanced instream habitat for fish and invertebrates as long as flood capacity was not compromised.



# THE PROPOSAL ACORN CLOSE TO CLAXTON PLACE

#### PLAN 10 OF 15



(2)

#### **Ensors Road/St Martins Road bridge**. The river was bridged here for the first

time as late as 1969. There is opportunity to develop a walking link under this bridge accessible during low tides.

Narrow track on bank may be widened and enhanced.

3 Road narrowing gives opportunities for a wider bank, new path, better river access and the planting of larger tree specimens.

4 This section of river channel is slow flowing and wider compared to upstream reaches. The depth of the water is tide dependent. On high tides some marine fish such as yellow belly flounder and stargazer may swim upstream to here. Potential exists to enhance the habitat without compromising the flood capacity of the river.



Popular white baiting stands in this area to be retained and possibly enhanced by the addition of seating and river margin planting.



# THE PROPOSAL DERRETT PLACE TO BECKFORD RD

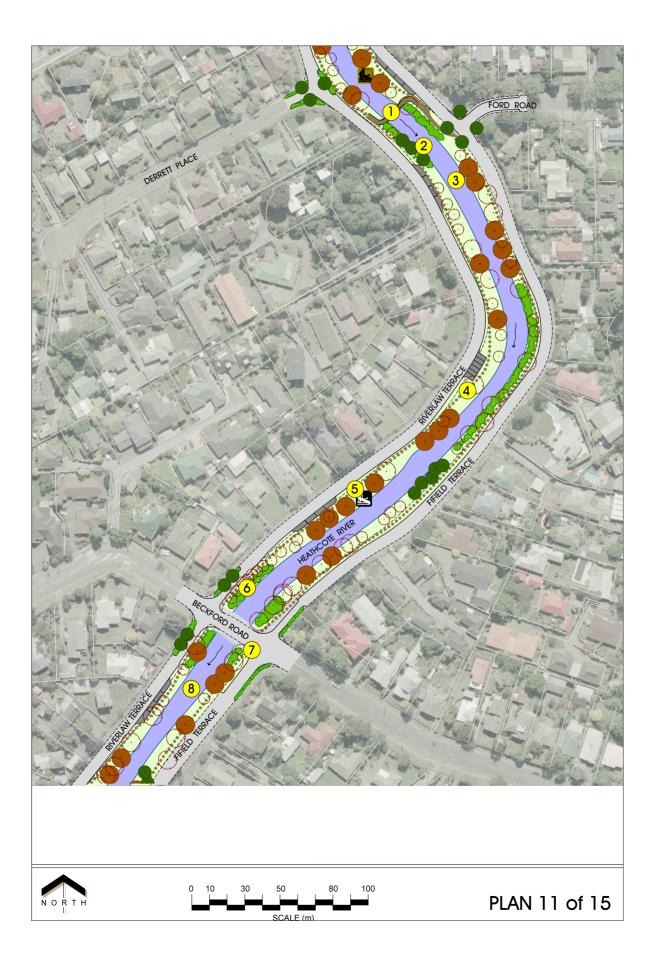
#### PLAN 11 OF 15

- Existing footbridge provides opportunities for integrated bridge art. As recently as 1965 there was a narrow vehicle bridge near this spot.
- 2 Proposed low growing river margin plants ensure views of the water can be enjoyed while establishing connective habitat linkages.
- 3 This section of the river channel is slow flowing and wider compared to upstream reaches. The depth of the water is tide dependent. On high tides some marine fish such as yellow belly flounder and stargazer may swim upstream to here.
- 4 Narrowing of existing road gives opportunity to provide extra car parking and a new path. Wider banks also allow the planting of larger tree species. The other side is narrower and steeper in places due to bank slumping. A wider bank may allow the existing rough path to be enhanced.
- 5 Popular white baiting stands in this area to be retained and possibly enhanced by the addition of seating and river margin planting.
- 6 Low growing river margin plants ensure views of the water can be enjoyed while establishing connective habitat linkages.

**Beckford Road bridge.** Built in 1882, was originally constructed of ironbark and totara on concrete abutments. Opportunities exist to incorporate colour, lighting, interpretation or integrated art as part of the overall consistent approach to built elements along the mid-Heathcote.

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8 While the river is tidally influenced along this reach, it consists of wholly fresh water. Short fin eel, common bully, giant bully and yellow eye mullet are common here. Potential exists to enhance the habitat without compromising the flood capacity of the river.



# THE PROPOSAL RUDOLF STEINER SCHOOL TO HANSENS PARK

(7)

#### PLAN 12 OF 15

(1)

Wide bank provides opportunities for a new path, extra car parking and access to the river.

2 Wide cul-de-sac area has room for a new planted roundabout for improved traffic flow and to reduce large area of seal.

- 3 Proposed new secondary path closer to the river's edge. This path may be narrower and constructed of crusher dust. Cyclists should be encouraged to use the existing upper path through Hansen's Park.
- Wide banks allow for planting of large specimen trees.

5 River widens here to approximately 12m. While the river is tidally influenced along this reach, it consists wholly of fresh water. River banks can be planted to provide improved erosion control and river edge habitat values.

6 Existing footbridge gives opportunity for integrated bridge art to incorporate colour, lighting, interpretation or integrate art as part of the overall consistent approach to built elements along the mid-Heathcote.

Proposed low growing river margin plants ensure views of the water can be enjoyed while establishing connective habitat linkages.



# THE PROPOSAL HANSENS PARK

#### PLAN 13 OF 15

Proposed realigning of the existing path allows more formal and safer access to the waters edge could be formalised and made safer. Steeper sections of the bank to be stabilised, perhaps by slope reduction and planting. Large canopy trees and low underplanting will ensure both visibility of the river is retained and ecological values enhanced.



Path between Riverlaw Terrace and King George V Reserve is to remain as a grassed path.

3 Realigning the existing path back into the park and away from the steeper parts of river bank will allow regrading of the bank and more intense planting to provide improved erosion control and river edge habitat values.



# THE PROPOSAL HANSENS PARK EAST

#### PLAN 14 OF 15

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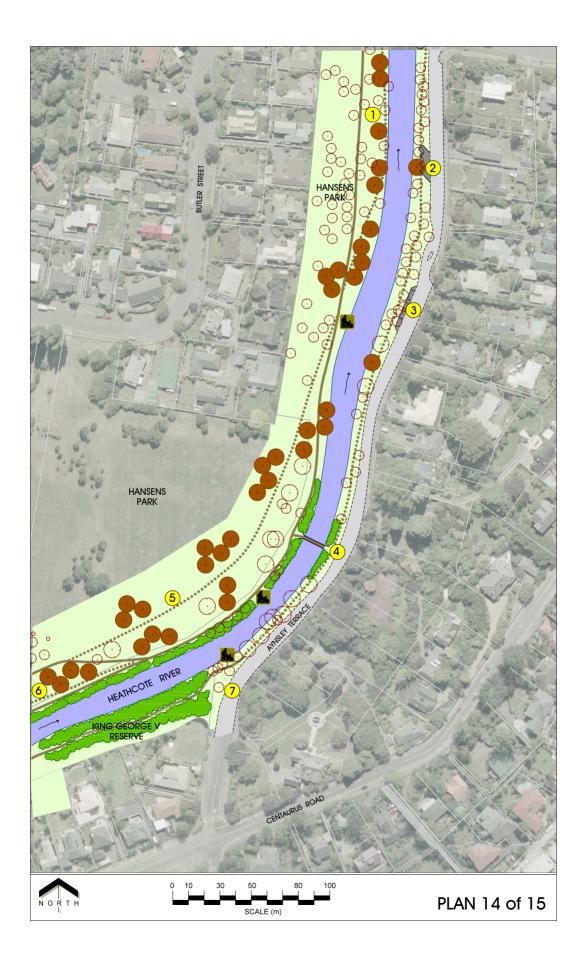
(4)

- 1 Enhance existing large tree planting especially close to the rivers edge for aesthetic, erosion control and ecological reasons. Provide a pedestrian path along the river's edge as an alternative route to existing wide shared cycle path. Regrade areas of bank to increase number of river access points. Plant steeper ungraded sections of bank with low planting to improve ecological values while retaining views of the river.
- 2 Formalise, and possibly seal, existing angled parking bays so their layout is more obvious and useable throughout the year. Protect the balance of the river bank from informal car parking by bollards, kerbs and/or planting. Retain and/or improve visibility of the river from car park areas.
  - Provide additional sealed parallel parking opportunities along Aynsley Terrace where appropriate and restrict vehicle access on to river bank throughout to enhance the safety of pedestrians and cyclists on the proposed shared path. Strengthen the existing character and tree cover by planting additional larger trees where river bank width permits. Regrade steeper banks and grass or plant as appropriate where bank width allows.
  - Existing footbridge linking Aynsley Terrace with Hansens Park provides opportunities to incorporate colour, lighting and integrated art as part of the overall consistent approach to built elements along the mid-Heathcote. Canopy tree and low shrub planting around the bridge ends should ensure safe sight lines for both bridge and path users. Steeper banks to be planted with large canopy trees and low underplanting to ensure both visibility of the river is retained and ecological values enhanced.

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Continue alignment of existing shared pedestrian/cycle path along the edge of the existing playing fields to provide a wider, safer alternative route for users passing through the park.

- 6 Realigning the existing path back into the park and away from the steeper parts of the river bank will allow regrading of the bank and more intense planting to provide improved erosion control and river edge habitat values.
- 7 Improve car parking at the entry to King George V Reserve, provide a safer river access point, and continue the existing path along the Aynsley Terrace side of the river bank.



# THE PROPOSAL HANSENS PARK TO OPAWA ROAD

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#### SHEET 15 OF 15

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- **Opawa Road bridge**. Marks the end point of the mid-Heathcote study area. The bridge provides potential opportunities through colour, interpretation, lighting and integrated art to be linked to the other built elements along this section of river. While the steeper banks should be planted with a combination of large canopy trees and low underplanting for erosion control and ecological and aesthetic reasons, it will be important to maintain safe sight lines for both bridge and path users.
- Existing pedestrian bridge and stepped 'beach' access. The bridge provides opportunities to incorporate colour, lighting and integrated art as part of the overall consistent approach to built elements along the mid-Heathcote. Canopy tree and low shrub planting around the bridge ends should ensure safe sight lines for both bridge and path users.
- 3 Formalise and possibly seal existing angled parking bays so their layout is more obvious and useable throughout the year. Protect the balance of the river bank from informal car parking by bollards, kerbs and/or planting. Retain and/or improve visibility of the river from car park areas.
  - Improve safety surveillance and visibility of path users and the river through this narrow section by selective removal of existing plants. Replant the area with lower growing species and possible path alignment and width improvements.

Existing footbridge provides opportunities to incorporate colour, lighting and integrated art as part of the overall consistent approach to built elements along the mid-Heathcote. Improve access to and visibility of Jacksons Creek from the river bank by removing some of the existing vegetation and regrading the bank.

- Provide additional sealed parallel parking opportunities along Aynsley Terrace where appropriate and restrict vehicle access on to river bank throughout to enhance safety of pedestrians and cyclists on proposed shared path. Strengthen existing character and tree cover by planting additional larger trees where river bank width permits.
  Regrade steeper banks and grass or plant as appropriate where bank width allows.
- Enhance the existing large tree planting especially in areas close to the rivers edge for aesthetic, erosion control and ecological reasons. Provide a pedestrian path along the rivers edge as an alternative to the existing wide shared cycle path. Regrade areas of bank to increase number of river access points. Plant steeper ungraded sections of bank with low planting to improve ecological values and replace historical inanga spawning sites while retaining views of the river.





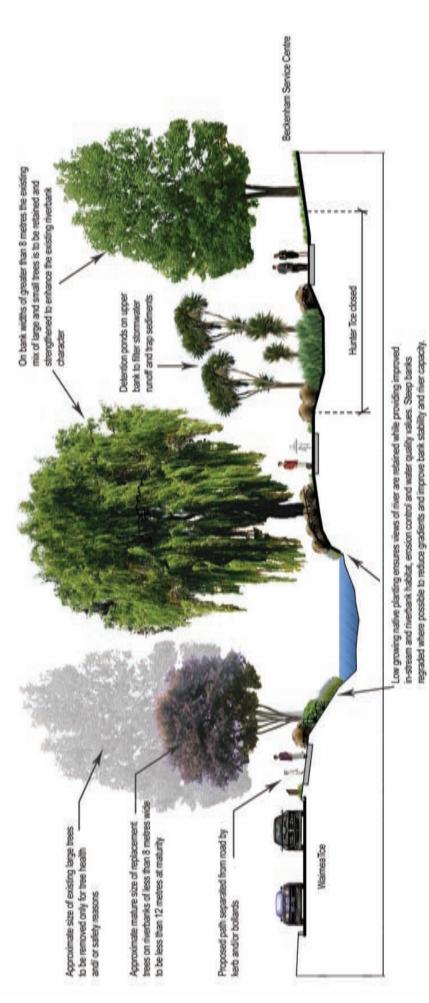
Ver boling upstrear - Wainea Tea



View looking upstream - Waimea Toe



View looking downstream - Waimea Toe



# THE PROPOSAL CROSS SECTION B

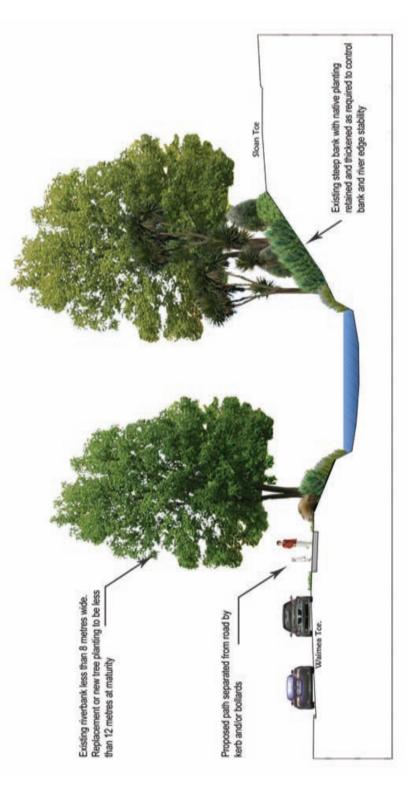
For the location of this cross section refer to Plan 3, page 55



View looking upstream - Waimea Toe



View looking downstream - Waimea Toe





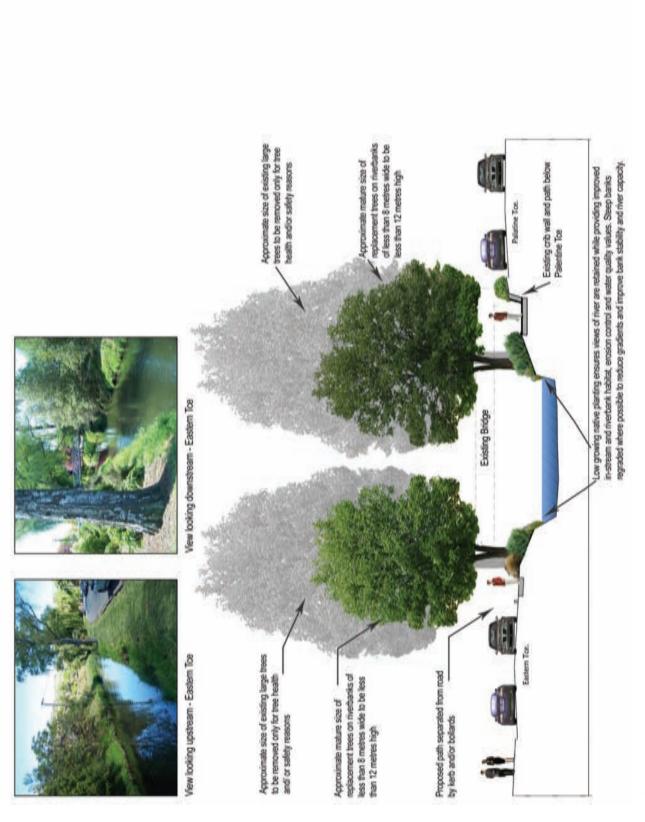


Vew looking downstream - Eastern Toe



# THE PROPOSAL CROSS SECTION D

For the location of this cross section refer to Plan 6, page 61



Cross Section D view looking downstream - section adapted from Heathcote River Catchment Investigation Sept. 1985 Christchurch Drainage Board





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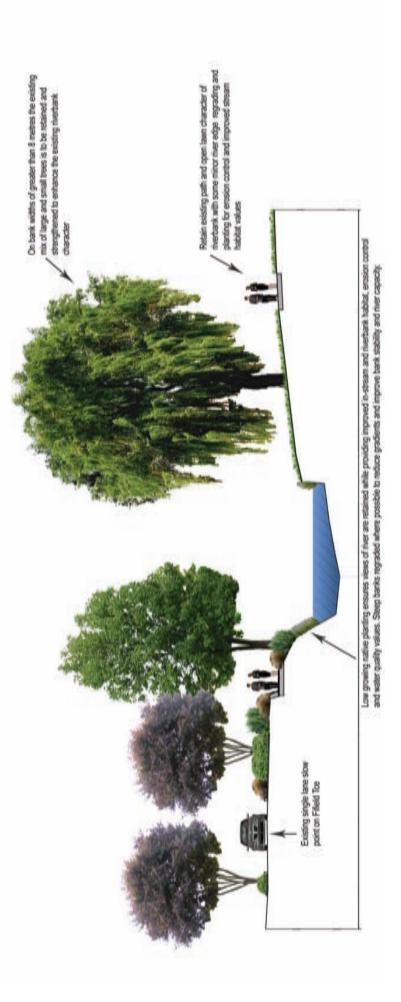
# THE PROPOSAL CROSS SECTION F For the location of this cross section refer to Plan 10, page 69



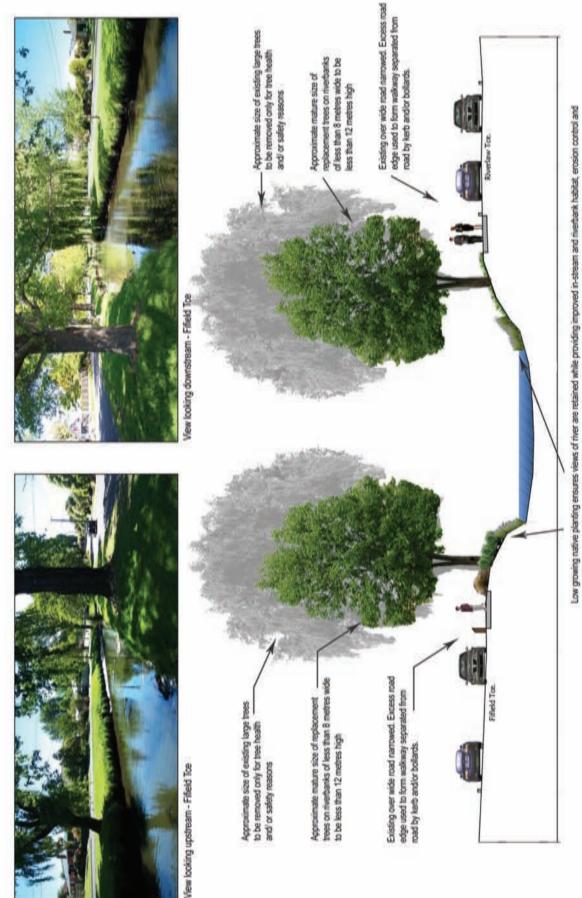
View booking upstream - Frield Toe



View boking downstream - Frifeld Toe



Cross Section F view looking downstream - section adapted from Heathcote River Catchment Investigation Sept. 1985 Christchurch Drainage Board



Low growing rative planting ensures views of river are retained while providing improved in-steam and niverbank habitat, emsion control and water quality values. Sheep banks regraded where possible to reduce gradients and improve bank stability and niver capacity.

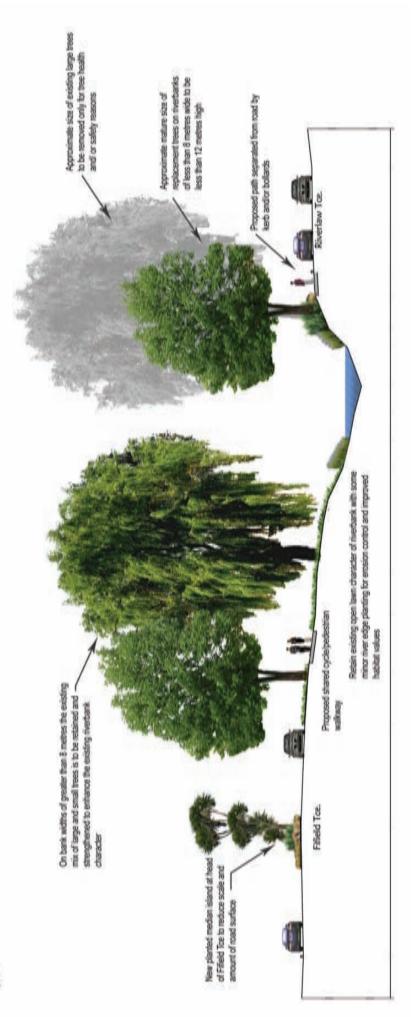
For the location of this cross section refer to plan 10, page 69

CROSS SECTION G

# THE PROPOSAL CROSS SECTION H For the location of this cross section refer to Plan 12, page 73



View looking upstream - Frifield Toe





Heathcote River/Õpawaho looking upstream from Malcolm Ave bridge.

# THE PROPOSAL SUGGESTED TIMETABLE

Reflecting community requirements, identified during the consultation process, two priority projects have been selected (indicated below). To address the high priority of these works these projects will be completed first. The remainder of the works will be completed sequentially. Works will commence in Section 1 and progress along the river. It is anticipated that completion of the full project will take 12 years.

Section 1	Colombo St to Malcolm Ave Priority Project – Conversion of pipeyard into reserve
Section 2	Malcolm Ave to Bowendale Ave Bridge
Section 3	Bowendale Ave Bridge - Tennyson St Bridge
Section 4	Tennyson St Bridge - Wilsons Road Bridge
Section 5	Wilsons Road Bridge - Ensors Road Bridge
Section 6	Ensors Road Bridge - Beckford Road Bridge
Section 7	Beckford Road Bridge - Hansens Park Footbridge
Section 8	Hansens Park Footbridge to Opawa Road Priority Project - Improvement of Aynsley Terrace