Shire of Creswick, Avenue of Honour, Kingston, Nov. 1999

Kingston Avenue of Honour

Management Strategy Plan

Prepared by

Shane Jeffrey

2002

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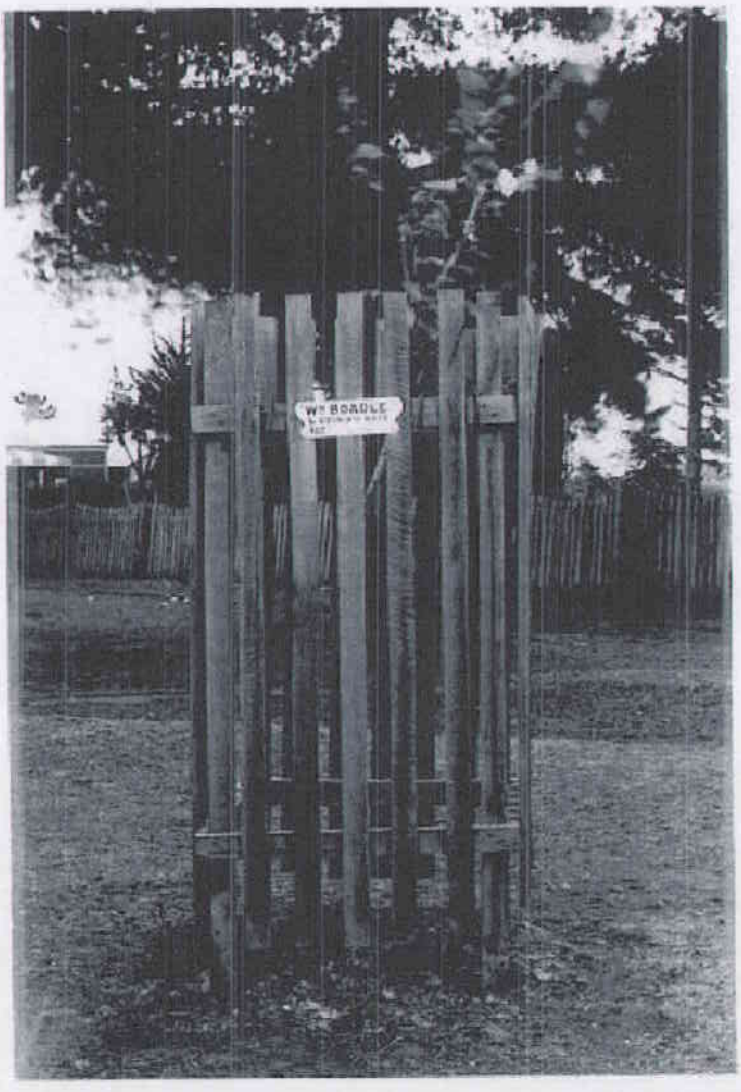

Fig No 1

ORIGINAL TREE SURROUND AND PLAQUE c. 1918
Tree No 102 planted for W M Boadle L CP LR 8th Batt.
(This tree is just North of the Cairn, in front of the Leishman home)

KINGSTON AVENUE OF HONOUR

1.0 INTRODUCTION

The planting of the 286 elms started in 1918. They were planted by the families of the men and women, who enlisted from the Shire of Creswick to serve in the First World War. Each tree had a cast iron name plate.
At the time the Shire of Creswick and Borough of Creswick were separate councils. (refer to page 6 for Districts represented in the Shire)
Kingston housed the Shire Offices and thus became the site for the Avenue of Honour. It was officially dedicated in 1927. The Monument has details of the event. (Refer to Fig 2) The Avenue of Honour is now within The Hepburn Shire.

The Avenue of Honour is located along the Kingston Road from the Midland Highway to the Stag Road, just south of the Kingston township. It is approximately 3 km long. It runs through farmland with rich volcanic soil, and is used for cropping and grazing. The trees are spaced about 20m apart and set well back from the edge of the road. This has given them plenty of room to grow.

FORMATION OF "THE FRIENDS"

In February 1999 a group of interested and concerned people formed "The Friends of the Avenue – Kingston." They became a sub committee of The Kingston Community Recreation Centre then set out to seek funding and to inform people of the project.

On Sunday June 6th 1999 a working bee was held to clean up the Avenue trees. This involved removing suckers, some pruning and clean up of rubbish along the Avenue. They hoped to complete the East side of the Avenue that day.
To their surprise 90 Volunteers participated and they were able to clean up all trees. This was a mammoth task since some suckers were more like trees themselves.

2.0 BACKGROUND TO THE MANAGEMENT PLAN

In 1999 The Hepburn Shire gave a grant of $500- towards the development of a management plan for The Avenue of Honour.

On the 24th October, 1999 six arborists donated a day of their time to carry out a tree survey on the Kingston Avenue of Honour.

This survey was to be used to develop this Management Plan for the future care of The Avenue.

The six Arborists who took part in the survey were Robert Amor, David Grant, Trevor Lawrence, Paul Norquay, Philip Smallman and Shane Jeffrey.

The Trees were assessed on Location details:- plaque number and name on plaques, overhead services, adjacent land use, tree details- Age, Health, Structure, Disease, Height, Trunk Diameter at Breast Height and Works required.

Refer to: **Appendix 1 Tree survey information**
Appendix 2 Tree survey collection sheets.
Appendix 3 West side Inspection Data
Appendix 4 East side Inspection Data
Appendix 5 Inspection Data Summary

Arborists Left to right Robert Amor, Trevor Lawrence, Paul Norquay, David Grant and Shane Jeffrey. (Philip Smallman not pictured)

3.0 HISTORY OF THE AVENUE

History of the Avenue taken from the Creswick Advertiser 1918.
(Entries made in inverted comma's are direct quotations)
Thanks to Jack Sewell, Geoff Fiddian, Julie Baulch

Tuesday April 9th

The Creswick Shire President Captain T. Parkin called a Public Meeting to be held at the Shire Hall on April 13th to discuss the proposal for an Avenue to recognise those who had volunteered for overseas service since the declaration of The Great War, on August 4th, 1914.

Monday April 15th

The Meeting supported the proposal, and resolved to call a further meeting on April 27th.

Tuesday April 30th

Headline - " Avenue of Honour, Creswick Shire's Proposal, Enthusiastic Meeting"
The article provides a detailed report of the April 27th meeting.
Discussion and debate focused on:

- **The location of the Avenue –**

Picken's Corner to Smeaton, start at the Show Grounds and go South towards Kingston, old Victoria corner, Kingston towards Coffey's corner.
" ...the amendment , fixing the avenue between Kingston and Springmount, was carried by a good majority."

- **The type of trees - Californian elms, evergreen oaks.**

The amendment that "... the opinion of an expert be sought..." was carried.

- **The type of tree guards –**

" It was decided that the tree guards be square."

- **Who would be represented in the Avenue? –**

"... all men and women from the shire who had enlisted since the war began."
" ... that all who volunteered were eligible for the privilege, for they may not have gone to the front through no fault of their own. The President remarked that the trees would first be planted for those who enlisted in the Shire, and then all natives who enlisted elsewhere could come in."

- **How to fund it? –**

" ... the motion to raise the money by voluntary contribution was then carried." A total of 79 pounds and 10 shillings was promised in donations at the meeting.

A committee was formed to represent each District within the Shire – Mollonghip, Rocky Lead, Mt Prospect, Eastern Hill, Kangaroo Hills, Kooroocheang, Campbelltown, Ullina, Smeaton, Moorookyle, Green Hill, Allendale, Broomfield, Springmount, Cabbage Tree, Kingston, Newlyn, Hollinwood.
The Presidents of all branches of the Red Cross Society throughout the Shire were invited to join the committee.

Tuesday May 7th

Notice of Committee meeting, May 8th

Tuesday May 14th

A working bee was called for May 18th, at 10am, to dig holes. Readers were advised that 150 elms were to be planted, each with a 3 foot square guard at the cost of 15 shillings each. A canvass would continue for subscriptions, and families of those serving were invited to contact the Committee Secretary, Mr W.H. Thomas of the Kingston State School.

Tuesday May 21st

The working bee was successful, with 150 holes sunk. The Red Cross provided refreshments.

Friday June 21st

Working bee Saturday, June 22nd
" ... meet at old Victoria Corner, Kingston at 11am ... every available helper wanted..."

" A meeting of the Committee ... was held in the Shire Hall on Wednesday evening... It was decided that the name plates, which have come to hand, be printed in black on a white background with name, rank and battalion to be shown, as well as a Maltese Cross where the soldier has been killed in action ... At the working bee ... ladies are to provide the refreshments ... The first tree is to start at Victoria corner. On Saturday carpenters will take charge of erecting the tree guards. A large gathering is expected for the working bee."

Wednesday June 25th

Tragically Mr H. Judson and his young son, along with the two daughters of Mr and Mrs Sullivan drowned in Joyces Creek, when their buggy came to grief in the quick flowing stream. This affected the attendance at the working bee.

Friday June 28th

" Through circumstances over which the ...Committee had no control, the working bee for the erection of the tree guards... was not a great success."

Friday July 5th

Another working bee tomorrow to erect the tree guards.

Tuesday July 9th

Details of the committee meeting held last Wednesday. The meeting discussed plans for tree planting day and suggested it be either late July or early August. 200 names had been registered. The cost of "... planting a tree, supplying a tree and tree guard, name plaque and everything complete was one pound..." It was agreed that Federal, State and local politicians be invited to attend the tree planting day.
It was reported that the working bee was attended by a" fine crowd ".

Monday July 22nd

Another excellent working bee was held with 50 tree guards transported from the railway station. All attention is now directed to the Tree Planting Day. The Red Cross Branches will provide refreshments.

Friday July 26th

Correspondence -- to the Editor
A letter bemoaning the " ...poor response there has been at the working bees to erect the tree guards..." signed Unselfish Farmer.

Tuesday August 6th

Planting Day August 10th is announced. Planting to start at 1pm. 225 trees would be spread over two and a half miles. Refreshments will be sold at the cost of one shilling. The politicians have been invited.

Friday August 9th

The lead article promotes the Tree Planting Day. Seven foot Canadian elms have been selected. The Smeaton Brass band will be in attendance.

Tuesday August 13th

" Honouring the Brave. Creswick Shire Avenue of Honour. Planting and Opening Ceremony. Highly Successful Function. Immense Assemblage."

The weather was fine and a large crowd was in attendance.
There were apologies from a number of politicians and the Mayors of local municipalities. The Creswick Mayor, Mr Wilson was ill and was represented by Cr. Jebb. Cr. Northcott represented the Borough Council, Cr. Yates represented the Shire, Cr. Stewart represented the Avenue Committee.
Captain Parkin thanked everyone for their attendance and recognised the Secretary, W.H. Thomas for his zealous efforts and " the Kingston Red Cross for providing refreshments every Saturday for those who took part in the working bees."
He then introduced Sir Alexander Peacock, who made a lengthy speech and declared the Planting Day open. He commented that, " The Avenue should be a very fine one in time to come."
Captain Thomas Parkin then explained how the plantings were to take place. The guards were numbered" commencing at the old Victoria corner with John Parkin as No.1 on the east side of the road, and with A C McKinnon on the west side as No. 2, the odd numbers being all on the east side and the even numbers on the opposite side..."
Drains were dug, 225 trees were planted and the group adjourned to a marquee on the north side of Cr Leishman's property to partake of the refreshments prepared by the local Red Cross groups.

Friday August 23rd

A working bee will be held tomorrow at 1pm to plant another 25 trees.
(Our research of the Creswick Advertiser stopped with this entry)

December 18th 1927

The Monument at the Corner of Kingston and Victoria Road was unveiled. inscribed as follows;

SHIRE OF CRESWICK
AVENUE OF HONOUR
A TRIBUTE TO OUR MEN AND
WOMEN WHO SERVED IN
THE GREAT WAR 1914-1918

This event is referred to in Jack Graham's book "Early Creswick "(Graham 1987)

During the years that followed ANZAC and REMEMBRANCE Day services were conducted at the Monument. These RSL services often involved the Kingston Primary School.
The Avenue grew well in the rich volcanic soil. The majority of the Elms thrived, though some died and were replaced by other species. (refer Appendix 6)
Overtime however the Services at the monument ceased and the Elms and Plaques were damaged, suckers grew and the Avenue fell into disrepair.

4.0 THE YEAR 1999

February – The Friends was formed as a sub committee of the Kingston Community Recreation Centre with the following goals;

1. to attend to the health of each tree
2. to clean up The Avenue
3. to restore and replace the name plaques
4. to establish a Memorial Cairn

March – informed other groups of our existence and to seek support

April – successful submission to Hepburn Shire Council for $500 to develop a Management plan for the trees, supported by Lou Newman.

May – a Public meeting was held to ratify our aims.

June – 90 people attended our first Working Bee. We cleared all the suckers in a day.

July – submission drafted for Veterans Affairs funding for Cairn and supported by Michael Ronaldson.

August – 1/3 of plaques were collected.

September – received $3,000 towards the Memorial Cairn from Veterans Affairs.

October – six arborists donated a day to assess the health of each of the 286 trees.

November - Creswick Spring Fiesta-fliers distributed via Primary School Show bags.

December – Kingston Show information stand. Planning for the Dinner Dance.

5.0 THE YEAR 2000

January - full on Dinner Dance planning, publicity and collecting donations for the Silent Auction. Council puts up Avenue signs.

February - distribution of our first Newsletter with help from the Creswick Community Centre to over 200 people.

March - cards made from an aerial shot taken by Alan Hives (see cover page, please note the top of the photo is South) and one enlarged and mounted for raffle. Displays of photographs and publicity were put together.
Dinner Dance and Silent Auction - 55 local businesses donated a wide range of goods and services. Hugh McDonald of REDGUM performed. 180 people from throughout the district attended. A memorable night.

April - Andersons Mill display and raffle and card sales. ANZAC Day raffle drawn and won by Friend, Brian Seamons of Smeaton. ANZAC Service held at the Monument with the Primary School. Planning for Rememberance Day Ceremony and Rededication of the Avenue Commences

May - the Cairn goes up. Thanks to Neil Cloke Creswick Monumental Mason, and the Hepburn Shire Council for funding the shortfall via another grant.

June - Shire Council removes suckers at Alcorns Lane and Gordon Hunt, arborist and his team voluntarily start on the hedge suckers. Remaining plaques collected.

July - Kingston Inn offer to provide space in the Dining Room to display Avenue memorabilia. Letters of thanks to those who contributed to the Dinner Dance and fund raising. Public Meeting held July 11th.

August - 126 plaques returned. HASCO Foundry starts casting and donates pattern boxes. Plaques were powder coated by Bill Miles and sandblasting completed by Chris Wright.

September – the rest of the plaques are returned. The second Newsletter is published. Planning for Remembrance Day takes up a lot of time. Local Primary Schools competition "What the Avenue means to me"

October – the final landscaping of the Cairn takes place. The Council donates blue metal and treated pine posts. Mr Pasco donates the cement for concreting. Friends of the Avenue volunteer their labour. An interesting rock is found and transported to the site to house the commemorative plaque.

November – 'Friends' work extremely hare to fine tune Remembrance Day Activities.

Saturday November 11th 2000

10 am – the Cairn was unveiled, and the Avenue rededicated by Michael Ronaldson MHR and blessed by Don Matthews – Salvation Army Chaplain.
Ambience was created by the piper Bill Williams, the Creswick Blue Light/RSL Light Horse Troup and the Creswick Municipal Band.

11 am – Jeff McMillan of the Creswick/Newlyn RSL Branch conducted the Remembrance Day Service at the Monument, with Suzie Koene of the Light Horse as bugler.

Well over 100 people attended the ceremonies and assembled at the Show Grounds to shar lunch, stories and memorabilia. Entertainment was provided by the Wendouree Harmomica Band and the Ballarat Highland Dancers Association. The Seven Hills Primar School displayed the entries in the poster competition.

December – The Inaugural May Townsend Community Service Award/ Kingston Primary School was awarded to the Friends.

2001-2002

Volunteer maintenance and fund raising continues.
New Friends emerge, with stories to tell. Management Plan Develops.

Fig No 2

Avenue Monument
Unveiled 18th December 1927
(Corner of Kingston and Victoria Roads Looking East)

Fig No 3

New Memorial Cairn lists all the names and tree numbers (E represents East, W represents West). The Commemorative Plaque marks the rededication of the Avenue on the 11/11/2000 (Corner of Kingston and Alcorns Roads, looking West)

6.0 EXISTING HERITAGE CLASSIFICATIONS

The Kingston Avenue of Honour has been 'recorded' by Heritage Victoria. An assessment was completed by John Hawker, Horticulturalist in about 1986. (refer to Appendix 8). The Avenue is referred to by John as "an impressive Avenue of trees growing on the roadside south of the Kingston township. The conditions of the trees vary from good to poor but all would benefit from a maintenance program. A few poor trees require removal and replanting".

6.1 Avenue effect and condition

"Though the width and spacings are quite large, the Avenue is effective to drive through because the trees are large and the avenue is virtually completed for the full 3km. Also the same species was used throughout, emphasizing the sense of uniformity and completeness. The Avenue is "lengthened" by a similar planting which runs from the end of the avenue through the Kingston township." (Hawker 1986).

Fig no 4

7.0 THREATS TO THE AVENUE

7.1 Pest and Disease

Due to this Avenue being almost entirely Elm Trees, threats to this species overseas and elsewhere in Australia are enormous. Potential threats to the Avenue are:

Elm Leaf Beetle (Pyrrhalta luteola)
Elm Bark Beetle (Scolytus scolytus or Scolytus multistriatus)
Dutch Elm Disease (Ophiostoma ulmi)

7.1.1 Elm Leaf Beetle

The beetle which is a native of Europe, was first found in Australia on the Mornington Peninsula in 1989. It has been recently discovered in Ballarat, Clunes, Bacchus Marsh and Woodend. The most recently discovered in Ballarat 2001. This means that it is only a matter of time before the beetle arrives in Kingston.

The beetle is approximately 6mm long, light yellow to brownish green, with black spots on the head and thorax and an indefinite black stripe on the outer margin of the wing cover. The larvae are 12mm long, yellow and spotted, with two stripes along the back. In Spring the adults fly to Elm trees, especially suckers, where they eat holes in the leaves and lay lemon-shaped eggs in double rows on the underside of the leaf. The larvae hatch in approximately one week and feed on the leaves. When they are fully fed they migrate down the tree trunk and pupate in the ground or in bark crevices on the trunk.

The beetle is known to attack most species, although English Elm U. procera, Scotch Elm U. glabra appear to be the most seriously affected. The major damage to the trees is caused by the emergent larvae, which skeletonise the foliage by feeding on the lower leaf surfaces causing the leaves to turn brown and fall to the ground, resulting in defoliation of the tree and loss of amenity value. Frequent attacks may lead to the premature death of a tree.

Sanitation is also an important measure in reducing beetle numbers. All tree litter, deadwood, diseased limbs and overwintering sites should be cleaned or removed. Sucker growth is the preferred feeding site for beetles coming out of hibernation and should be carefully inspected for damage. In the case of infestation, all sucker growth should be removed.

Fig no. 5

7.1.2 Elm Bark Beetle

The Elm Bark Beetle is a vector for the transmission of the deadly fungal Dutch Elm Disease. The beetle is approximately 3mm long and is brownish-black with light brown legs. It is attracted to stressed Elms by volatile chemicals produced by the tree. The beetles typically feed on or bore into twig crotches in the upper section of the crown. Most feeding injuries occur at the junction formed by a current year's shoot and the previous year's growth. Beetles usually feed within 80m of the original tree, but may fly up to 10km to breed on weakened or dying wood. Flight activity occurs from mid Spring to mid Autumn.

The beetle breeds on the inner bark of Elms that are stressed or declining, on pruning wounds and diseased or broken limbs. Beetles can also breed in trees or logs for up to two years after the tree's death or felling. The beetle deposits eggs during Summer and Autumn. They pupate and bore out through the bark, leaving holes 1 to 2 mm wide. The Elm Bark Beetle produces three generations each year, two during the growing season and one over Winter. Bark that has produced beetles is not suitable for further breeding or feeding.

Over mature and stressed Elms, and those containing deadwood, are very susceptible to attack by the bark beetle. The first symptoms are a general weakening of the tree, yellowing, and a lack of foliage on some of the smaller branches. Branches damaged by the girdling effect of the beetle are generally near the top of the tree and this results in branch dieback. A heavy infestation can girdle the trunk and seriously damage or even kill weakened trees, especially those suffering from water stress.

The most effective method of beetle control is a program of detection and sanitation. Regular inspections should be undertaken to monitor and record the presence of the beetle and prune infected branches. In severe cases the tree may die after a few years if pruning is not done in time. Pruning should not occur during beetle emergence in Spring and Summer as they will be attracted to the fresh pruning cuts. All diseased or damaged branches and deadwood should be removed from the trees. Over mature or stressed trees, stumps and suckers, which are a potential breeding site for the beetle, should also be removed and any parts remaining in the ground should be treated with a herbicide to prevent sucker regrowth. The main objective should be to reduce beetle populations to a very low level, particularly as a defence against a possible future occurrence of Dutch Elm Disease.

7.1.3 Dutch Elm Disease

Dutch Elm Disease is perhaps the most severe disease of ornamental trees and one of the most widely known plant diseases in the world. It is widespread throughout the northern hemisphere and has caused the death of most of the major Elm plantings throughout America, Europe and Britain. Although Dutch Elm Disease has not has not yet reached Australia, the recent discovery of the disease in New Zealand is of extreme concern. Within Australia the favourable climate, the presence of Elm Bark Beetle, and the dense planting of susceptible Elm species would result in the rapid spread of the disease.

Dutch Elm Disease is caused by a fungus which inhabits the xylem (the water-conducting tissue). The fungus has four commonly observed spore stages, each found in the beetle breeding galleries of infected Elms. The fungus may move from tree to tree internally through root grafts or externally through spores adhering to the beetle vector. From the point of inoculation, the fungus moves upwards and downwards by passive transport of the spores within the xylem, and by the growth of hyphae between vessels after spores germinate at points of vessel attack. The spread is rapid and regularly reaches the roots of large trees within the first season of infection. Environmental factors can influence the host's susceptibility, but vigorously growing trees are generally more susceptible than slow growing ones. All Elm species are susceptible, although the effect on those from Himalaya and Asia may be minimal.

8.0 RECOMMENDATIONS

8.1 Avenue Character and Design Intent

Maintain and reinforce the existing general character of the Avenue with the use of broad, leafy, 'green', exotic, traditional trees. Re-establish the original integrity of the Avenue by 'filling the gaps' as they emerge. These should be replanted as close as possible to their original location and alignment.

Ensure that adjacent land use, signage and planting does not detract or intrude on the visual character and quality of the Avenue. Create a 'vegetation free' buffer on either side of the Avenue, and introduce strict design guidelines with regards to roadside signage and screen planting of adjacent private or commercial developments. (for example large Cyprus trees competing with Avenue trees)

8.2 Unsuitable and Suitable Tree Species

Remove existing trees identified as 'unsuitable' species for the Avenue. These trees would have been planted to replace Elms that were removed from the Avenue. These include Desert Ash, *Fraxinus angustifolia* and Lombardy Poplar, *Populus nigra 'Italica'*. If possible permission should be obtained from descendants/family's of the serviceman/women named on the plaques before any tree is removed. Removal of trees should only carried out when these trees are in poor health and/or structure and need to be removed. Some of the Elms are currently in this state and will need to be removed and replaced.

All replacement trees in the Avenue should be Elm species identified 'suitable' tree species. These include English Elm (Ulmus Procera), Dutch Elm (Ulmus X hollandica) and Scotch Elm (Ulmus glabra). (Spencer,Hawker,Lumley 1991)

Dutch Elm Disease resistant Elm cultivars should also be obtained and planted. Possible trial plantings of such species outside of The Avenue may be useful to monitor suitably to local conditions.

Tree stock should be purchased by the Hepburn Shire and only from reputable nurseries or tree farms.

8.3 Ongoing Maintenance Program

A visual inspection of every tree in the Avenue should be carried out by an arborist on an annual basis. Preferably this should occur during late spring when the trees are coming into leaf but still have open canopy. Particular attention should be paid to evidence of infestation of Elm Leaf Beetle, Elm Bark Beetle, or Dutch Elm Disease. (refer to 7.0 Threats to The Avenue)

Develop a comprehensive long-term management strategy, which responds to the threat of Dutch Elm Disease. Funding will be required to combat pest and diseases particularly Elm Leaf Beetle as it has already been discovered in Ballarat and Clunes in the summer of 2001. (Contact list to report the presence of the Elm Leaf Beetle refer to Appendix 10) Some Councils have had great success in controlling numbers of Elm Leaf Beetle with chemical spraying regimes, but it is expensive. A pest and disease control program and budget may be required to combat an outbreak at short notice.

Establish and maintain a routine pruning program in order to maintain good health and structure of the trees and also to allow tractor mowing of grass without damage to low branches.

The works identified by the arborist survey as being priority 1 should be done as a matter of urgency. These works should be done by a qualified arborist. (List of priority 1 works refer to Appendix 1). When all priority 1 works have been completed, commencement of priority 2 works should begin. (Priority 2 works can be found on the original arborist work sheets).

If appropriate, apply to have the Avenue 'Classified' by Heritage Victoria, as it is currently only classed as 'Recorded'. This will give the Avenue greater protection. This would mean anyone wishing to carry out works near any of these trees would have to apply for permission from Heritage Victoria. (Refer to Appendix 8) Council planning controls may be a more effective method of achieving the same goals.

8.4 Weed Control and Grass Slashing

Control weed growth with Glyphosate sprayed in a 1m radius around the base of all trees. Spraying should occur twice per year. At the start of Spring and at the end of Autumn. This will allow for easier mowing and neater presentation also protect the bases and trunks of trees from mower damage. Other weed species such as silver wattle (Acacia dealbata)will need to be sprayed separately.

Maintain current grass slashing regime. During years of increased growth increase to 4 cuts per year. This may be done by the Hepburn Shire and local farmers as long as it is done responsibly with no damage to trees.

8.5 Services and Utilities

In the long term, all existing overhead services and utilities adjacent to the Avenue should be relocated underground or converted to overhead bundle cable to improve the visual amenity and eliminate the need for ongoing clearance pruning. A quote was obtained from Powercor in December 1999 to install bundle cabling in part of the avenue, this proved to be very expensive. (refer to Appendix 9).

All groundwork's should be kept clear of the tree drip line (plus a 5m safety/buffer zone), and be supervised by a qualified arborist. Educate the service and utility providers about the significance of the Avenue and the detrimental effect their work can have if not done in a sensitive manner. It is worth noting that some damage has occurred to Avenue Trees both above and below ground by service authorities in recent years. The Hepburn Shire needs to be vigilant in monitoring any proposed works that are to be carried out within the vicinity of The Avenue.

8.6 Plaques Value and Care

The original iron name plaques were mounted on metal stands at the base of each tree, facing the road. There were problems with this mounting as many of the plaques were damaged by tractor mowers, lost in the grass or buried. Plaques that were in good condition were recovered and restored. Some plaques were recovered using a metal detector. Others that were badly damaged or lost were re-cast in aluminium. All plaques were sandblasted and powder coated black with gold lettering and gold border, then mounted on to the tree trunks. It was decided to mount the plaques on the trunks of the trees for their own protection from mowers and to better display them. (see Fig 12)

Plaques will need to be replaced or repaired whenever they are found to be damaged (To maintain this existing feature, historic value and personal connection between the tree and the person for whom the tree was planted). The Avenue committee has been taking donations from the descendants and fund raising for this type of work. Each plaque is mounted using two galvanized screws and rubber spacers between the plaque and the tree bark. The mounting screws on the plaques will need to be annually loosened to prevent the trees from growing over or breaking the plaques as the trunks increase in diameter.

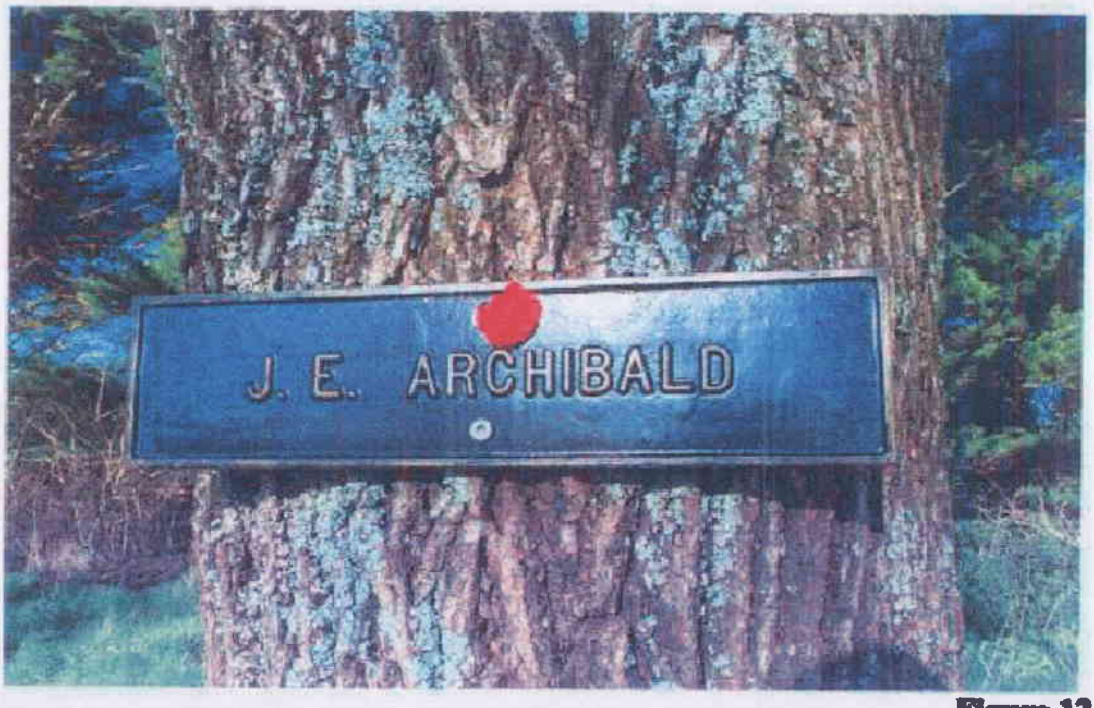

Figure 12

8.7 Future Protection and Funding

This Mangement Strategy Plan should be adopted by Council as the guiding document for the ongoing care and maintenance of the Avenue. The recommendations it contains should be implemented.

A reliable and appropriate level of funding for works in the Avenue should be secured for the medium to long term maintenance and care of the Avenue. Additional sponsorships should also be sought.

This management report should be reviewed after five years and updated or completely reassessed as required at the time. An Arborist inspection of the Avenue will need to be carried out also as part of this review.

Hepburn Shire should employ a consultant for this review. This should be Budgeted for by the relevant council department.
(Heritage Department/Parks & Gardens?)

9.0 References

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Graham,J.A. (1987) *Early Creswick,* Creswick Historical Museum, Creswick.

Acknowledgements

. Julie Baulch, Jack Sewell and Geoff Fiddian for compiling history details for this document.

. Robert Amor, Trevor Lawrence, Paul Norquay, Phillip Smallman, David Grant and Shane Jeffrey for donating their own time to survey The Avenue.

. David Grant for his advice and time assisting with the Report.

. The Avenue Committee for all of their hard work and ongoing commitment to the well being of The Avenue.

. Typing of the Management Strategy Plan was completed by Therese Jeffrey

. Hepburn Shire and Councillor Lou Newman(Friend of Avenue)

. Department of Veterans Affairs

. Creswick Blue Light/RSL Light Horse Troup and RSL Creswick Sub-Branch

. Thanks to Kingston Inn with assistance to fund raising and support

Contacts and Information

Mailing address: Friends of Avenue
C/- Post Office, Kingston Vic 3364

Website address: www.vicnet.net/@kingcomm-go to avenue

Appendix 1

SUMMARY PRIORITY 1 WORKS	EAST SIDE TREE NUMBER
Hazard Pruning –	1,2,95
Deadwood Removal -	1,2,89
Crown/Weight Reduction Pruning-	71,82,84
Tree Removal-	76,80
Cable Bracing-	79,83,96

SUMMARY PRIORITY 1 WORKS	WEST SIDE TREE NUMBER
Hazard Pruning-	119
Deadwood-	
Crown/Weight Reduction Pruning-	
Tree Removal-	90
Cable Bracing-	58,103,104,133

TIMELINE

YEAR	TIME FRAME	TASKS
1st year	Immediate	Priority 1 works ELB Inspections Sucker Removal
2nd year	Short Term	Priority 2 works Re-inspect trees

Location Details.

O.H. SERVICE

Identifies the overhead electrical services that are or will impact on the tree, allows for identifying multiple items.

Options are:

Low voltage

All bare low voltage (240 volt) SEC lines within the mature canopy reach of the species being surveyed.

High Voltage

All bare high voltage (up to 22kv) SEC lines within the mature canopy reach of the species being surveyed.

66KV

All 66KV SEC lines within the mature canopy reach of the species being surveyed.

Service

All electrical building service connections, Tram Lines, Guy wires, Telecom and other electronic communication cables within the mature canopy reach of the tree being surveyed.

Street Light

All street lighting. traffic lights, security lighting and/or flood lighting within the mature canopy reach of the species being surveyed.

LVABC

All SEC low voltage aerial bundled cable within the mature canopy reach of the tree being surveyed.

HVABC

All SEC high voltage aerial bundled cable within the mature canopy reach of the tree being surveyed.

Please Note: for overhead services:

- Service - if this option is selected then the particular service should be described in the "Notes" facility on the coversheet.
- Where there are combinations of the overhead services at a tree site then they are all to be entered.
- All overhead services are to be identified at "Vacant Sites".

Tree Details

SPECIES ID

Identifies the existing species to Genus, species and cultivar level.

Please Note:

- If species is not known enter as Unknown sp.

AGE (4 Categories)

Young

generally less than 10 years old, still developing main branch system, requires regular formative pruning to develop structure.

Semi Mature

approximately 10 to 20 years old, basic branch system well formed, requires regular but only minor shaping/pruning to maintain form/structure.

Mature
generally over 20 years old, still increasing in size by requires no regular pruning/shaping to maintain integrity of form/structure.

Decline
overall condition deteriorating, requires regular removal of deadwood, 'structure' and/or 'health' likely to become 'poor' within 10 years.

HEALTH (5 categories)

Very good
foliage colour and density plus annual shoot/extension growth plus woundwood development well above average, no diseases present.

Good
foliage colour and density plus annual shoot/extension growth plus woundwood development all average, some minor disease/s may be present but insignificant.

Fair
foliage colour and density plus annual shoot/extension growth plus woundwood development all below average and/or disease/s present and affecting the health slightly, some minor deadwood and/or tip dieback may be present .

Poor
foliage colour and density plus annual shoot/extension growth plus woundwood development all severely retarded and/or outer canopy dieing back and/or disease/s present and causing significant affects.

Dead
health of the tree reached a point of no recovery, any remedial works will have no affects/benefits.

STRUCTURE (4 categories)

Very good
no decay or structural defects evident.

Good
minor decay and/or structural defects present but not affecting main branch/trunk framework, none or only minor remedial work required.

Fair
some decay and/or structural defects and/or structural defects affecting the main branch/trunk framework, remedial works necessary.

Poor
extensive decay and/or structural defects affecting the main branch/trunk framework, extensive remedial work required or not practical/possible.

DISEASE (6 categories)

Fungal
Virus
Bacteria
Insect
Unknown
Disease Free

HEIGHT (5 categories)

< 3 metres
3 - 6 metres
>6 -10 metres
>10 - 15 metres
> 15 metres

DIAMETER AT BREAST HEIGHT(DBH) (6 categories)

< 10 centimetres
11-25 centimetres
26-45 centimetres
46-60 centimetres
61-90 centimetres
> 90 centimetres

Works Required.

WORKS ITEMS/REQUIREMENTS (21 categories)

H.V. Clearance
(Sites where there is voltages present up to 22KV)
Any pruning required, or will be necessary within 2 years, to maintain the 'Clearance Space" free of vegetation (as per the SEC Code of Practice - Tree Clearing).

L.V. Clearance
(240V systems only present)
As above.

66Kv Clearance
(site where there is 66KV Present)
As above.

Service
(One or more of the following only present - house connections, street lights and their cables, traffic lights, tram lines, service cables) Any pruning required to provide for the safety and effective functioning of the assets listed.

Hazard Pruning
Removal of storm damage, broken/split branches and any hazards posing a threat to life and/or property.

Deadwood Removal
Pruning required to remove dead branches

Disease Control
Any remedial or preventative works required to overcome diseases likely to cause deterioration of the trees condition or create nuisance/damage to the public or property.

Post Planting Maintenance
Any remedial works required to prevent the condition of 'young' trees from deteriorating eg staking, weed control, fertilising etc.

Cabling/Bracing
Any cabling and/or bracing work required to prevent the trees 'Structure' from deteriorating.

Watering
Provision of water to trees to improve or stop the deterioration of their 'Health'

Inspection
Trees that require a thorough examination to accurately determine their 'Condition' and/or 'Works Requirements' or trees that need a follow up inspection at a later date to determine their 'Condition' and/or 'Works Requirements'.

Crown Lifting
Trees that require removal of low branches/vegetation to remove or prevent a threat and/or nuisance to life and/or property, including that required within 3 years of inspection.

Formative Pruning
Pruning required to prevent structural defects from developing and/or remove existing structural defects plus pruning to create a suitable crown shape within the site constraints.

Tree Removal
Complete removal of a tree.

Tree Planting
Planting of a suitable tree.

Crown Reduction
Work required to reduce the overall size of either the whole crown or part/s thereof.

Crown Restoration

Trees requiring crown shaping and/or thinning to restore their natural canopy form.

Root Pruning / Barrier
Works to overcome conflicts between tree root growth and the site assets, may be either curative or preventative.

Sucker Treatment
Works required to overcome damage and/or nuisance being caused by root suckers or basal trunk suckers.

Stump
Removal of a tree stump, including tree trunks only.

Other
Any works required that do not fit in to the previous categories - need to add the detail in the 'Notes' facility.

CREW CODE (5 categories)

Identifies the specific crew most suitable to undertake the tasks identified.

Tower Crew (T)
Elevating Platform Vehicle (EPV - 16M)

Ground Crew (G)
Works to be done from the ground, no specialised equipment or climbing skills required.

Afron Crew (A)
Mobile Powerladder with a maximum working height of 5 metres.

Climbing Crew (C)
Team of experienced rope and harness tree climbers

Other (O)
Specify in the "Notes" section.

Not Specific (N)
Use if not important which crew does the work.

ESTIMATED HOURS

The amount of time necessary for the crew to complete the works order listed.

PRIORITY (5 categories)

Priority One (P1)
Urgent works required - Complete ASAP. Threat to life and/or property.
Please Note: examples of Priority One works are:

- Any tree branches well within the high voltage "Clearance Space" (as defined in the SEC Code of Practice - Tree Clearing).
- Any tree branches physically putting pressure on aerial bundled cable, services, street lights etc.

- Any tree branches growing up through low voltage conductors.
- Large broken, hanging, split or dead branches over vehicular or pedestrian use areas.
- Trees splitting apart.
- Trees with low branches at intersections obstructing vehicle/pedestrian visibility.
- Sharp branches or branch stubs low over footpaths ie. eye pokers/likely to cause physical injury.
- Trees lose in the ground and/or threatening to fall.

Priority Two (P2)
Definite, but non-urgent, threat to life and/or property or 'Condition' of tree.

Please Note: examples of Priority Two works are:
- Any tree branches touching bare low voltage conductors (including bare service wires).
- Any tree branches beginning to infringe the high voltage "Clearance Space".
- Low tree branches over carriageways that hinder normal vehicular traffic ie. tall vehicles may need to move towards the centre of road to get past trees.
- Low branches over footpaths physically hindering normal passage.
- Trees with structural weaknesses likely to deteriorate significantly over next 12 months.
- Branches that are long and end heavy beginning to show signs of twisting or splitting.
- Disease or disturbance to tree causing significant affects on its health.
- Hard structures lifted by tree roots and causing obvious trip points in footpaths or pedestrian areas.

Priority Three (P3)
Developing threat or nuisance to life and/or property or 'Condition' or tree.

Priority Four (P4)
Works required to prevent a 'nuisance' occurring and/or 'Condition' of tree from deteriorating.

Priority Five (P5)
Aesthetic pruning only or routine maintenance works required to prevent long term problems.

Kingston Avenue of Honour - Tree Assessment and Maintenance Report.

Inspected By: S Jeffery **Date:** 24-10-11

Location Details

Plaque No./Sequence: 88 Name:

Overhead Services: ☑ LV ☐ H.V. ☐ 66KV ☐ Servic ☐ Street Light ☐ LVAB ☐ HVABC

Adjacent Land Use: Farm House

Notes:

Tree Details

Genus / Species / Cultivar: Ulmus procera

Age ☐ Young ☐ Semi Mature ☑ Mature ☐ Decline

Health ☐ VG ☑ Good ☐ Fair ☐ Poor ☐ Dead

Structure ☐ VG ☐ Good ☑ Fair ☐ Poor

Several Bark included forks

Disease ☐ Fungal ☐ Virus ☐ Bacteria ☐ Insect ☐ Other

Height (m) ☐ <3 ☐ >3-5 ☐ >5-10 ☐ >10-15 ☑ >15

DBH (cm) ☐ < 10 ☐ >10-25 ☐ 26-45 ☐ 46-60 ☐ 61-90 ☑ >90

Stump Diameter (ground level): (cms)

Notes:

Works Required/Completed

	Works Item	Works Crew	Hours	Priority	Complete by or on?
1	☑ H. V. Clearance:	T	.5	5	
2	☑ L.V. Clearance:	T	.5	5	
3	☐ 66 kV Clearance:				
4	☐ Service Clearance				
5	☐ Hazard Pruning				
6	☑ Deadwood removal	C	2	2	
7	☐ Disease Control				
8	☐ Post Planting Maint				
9	☐ Cabling / Bracing				
10	☐ Watering				
11	☐ Inspection				

		Works Crew	Hours	Priority	Complete by or on?
12	☑ Crown Lifting	A	1	4	
13	☐ Formative Prune				
14	☐ Tree Removal				
15	☐ Tree Planting				
16	☐ Crown Reduction				
17	☐ Crown Restoration				
18	☐ Root pruning/barrier				
19	☐ Sucker treatment				
20	☐ Stump				
21	☐ Other (see below)				

Specify:

Notes: 6 Tree in front of Farm House has lots of deadwood and broken branches

Appendix 4

WEST SIDE – INSPECTION DATA

Overhead Services-	**High Voltage – 142**		
	Low Voltage - 25		
	High Voltage Aerial Bundle Cable – 3		
SPECIES-	**Ulmus X hollandica (Dutch Elm)**		**93**
	Ulmus procera (English Elm)		**37**
	Ulmus glabra (Scotch Elm)		**11**
	Populus nigra 'italica'(Lombardy Poplar)		
	Fraxinus species (Ash)		**0**
AGE -	**Mature**	**139**	
	Semi-Mature	**2**	
	Young	**0**	
	Decline	**1**	
HEALTH -	**Good**	**108**	
	Fair	**31**	
	Poor	**3**	
STRUCTURE-	**Good**	**68**	
	Fair	**61**	
	Poor	**13**	
HEIGHT -	**> 15m**	**52**	
	10-15	**65**	
	5-10	**21**	
	3- 5	**4**	
	< 3	**0**	
DIAMETER AT BREAST HEIGHT			
	> 90m	**21**	
	61-90	**71**	
	46-60	**34**	
	26-45	**16**	
	10-25	**0**	
WORKS-	**Hazard Pruning**	**13**	
	Crown Lifting	**94**	
	Deadwood Removal	**52**	
	Formative Pruning	**1**	
	Crown Reduction	**3**	
	Sucker Treatment	**27**	
	Tree Removals	**3**	
	Crown Restoration	**23**	
	Cable Bracing	**7**	
	Disease Control	**1**	
	Inspection	**0**	

Appendix 5

EAST SIDE – INSPECTION DATA

Overhead Services-	**High Voltage – 2**		
	Low Voltage - 4		
	High Voltage Aerial Bundle Cable – 3		
SPECIES-	**Ulmus X hollandica (Dutch Elm)**		**100**
	Ulmus procera (English Elm)		**25**
	Ulmus glabra (Scotch Elm)		**17**
	Populus nigra 'italica'(Lombardy Poplar)		**1**
	Fraxinus species (Ash)		**1**
AGE -	**Mature**	**134**	
	Semi-Mature	**9**	
	Young	**1**	
	Decline	**0**	
HEALTH -	**Good**	**96**	
	Fair	**41**	
	Poor	**7**	
STRUCTURE-	**Good**	**89**	
	Fair	**48**	
	Poor	**7**	
HEIGHT -	**> 15m**	**58**	
	10-15	**65**	
	5-10	**20**	
	< 3	**1**	
DIAMETER AT BREAST HEIGHT			
	> 90m	**14**	
	61-90	**59**	
	46-60	**49**	
	26-45	**13**	
	10-25	**9**	
WORKS-	**Hazard Pruning**	**10**	
	Crown Lifting	**57**	
	Deadwood Removal	**79**	
	Formative Pruning	**2**	
	Crown Reduction	**11**	
	Sucker Treatment	**22**	
	Tree Removals	**3**	
	Crown Restoration	**34**	
	Cable Bracing	**7**	
	Disease Control	**3**	
	Inspection	**1**	

Appendix 6

INSPECTION DATA SUMMARY

EAST SIDE – 144 TREES/WEST SIDE – 142 TREES

TOTAL –286 TREES

Overhead Services-	High Voltage – 144	
	Low Voltage - 29	
	High Voltage Aerial Bundle Cable – 6	
SPECIES-	Ulmus X hollandica (Dutch Elm)	193
	Ulmus procera (English Elm)	62
	Ulmus glabra (Scotch Elm)	28
	Populus nigra 'italica'(Lombardy Poplar)	2
	Fraxinus species (Ash)	1
AGE -	Mature	273
	Semi-Mature	11
	Young	1
	Decline	1
HEALTH -	Good	204
	Fair	72
	Poor	10
STRUCTURE-	Good	157
	Fair	72
	Poor	10
HEIGHT -	> 15m	110
	10-15	130
	5-10	41
	3-5	4
	< 3	1
DIAMETER AT BREAST HEIGHT		
	> 90m	35
	61-90	130
	46-60	83
	26-45	29
	10-25	9

WORKS-	**Hazard Pruning**	**23**
	Crown Lifting	**151**
	Deadwood Removal	**131**
	Formative Pruning	**3**
	Crown Reduction	**14**
	Sucker Treatment	**49**
	Tree Removals	**6**
	Crown Restoration	**57**
	Cable Bracing	**14**
	Disease Control	**4**
	Inspection	**1**

NAMES OF THOSE COMMEMORATED IN THE OLD SHIRE OF CRESWICK AVENUE OF HONOUR

W	99	Allen Robert H
E.	2	Allen Robert William
E.	141	Anderson Sister M
E	19	Anderson Gordon T
E	20	Anderson Stanley R
E	3	Archibald Ernest O
E	4	Archibald James L
E	79	Archibald J.E.
W	52	Argent Harry Oscar
W	53	Argent James
W	92	Armstrong Frank A
W	93	Armstrong Wilfred L
E	39	Astley Thomas
E	40	Astley W. H
E	64	Atkins A. V
E	66	Atkins G. T.
E.	65	Atkins N.B
E	100	Atkins Richard
E	67	Atkins Silas
E	122	Atkins W. H.
W	3	Baker Chas T
E	74	Baker Fred
W	4	Baker John A
E	58	Balfour R. J
E	68	Barnes A. W
E	69	Barnes Thos,L
W	39	Beasley Sister E
W.	17	Beasley Fred J
W	80	Bell John S
W	5	Betts E A
E	125	Binns W. C.
E	130	Bloink G.H
E	121	Boadle J
W	51	Boadle W. M
E	23	Bolton Thos.
E	21	Booth Arthur Chas.
W	110	Bourke E.T.
W	7	Bourke T.
W	109	Bourke W.J.
E	17	Boustead A.G.
E.	18	Boustead Howard W
W	135	Bowes J.C.
E.	91	Boyes J.A.
E	114	Branagan B.T.
W	37	Brawn Sister A
W	38	Brawn Sister E
W	79	Bridgeford W. M.
W	16	Brinsden G. J
E	137	Broadbent J.R.
E	136	Broadbent W.B
E	75	Bullen Harold
W	96	Byron A J
W	19	Caldwell Alex G
E	142	Caldwell T
W	18	Caldwell Robert
W	103	Caligari A
W	104	Caligari B.P.
E	109	Cane E.J
E	5	Carey D
E	117	Cassell E
E	116	Cassell G.H.
E	118	Chambers S
E	62	Chapman R.H.
W	6	Clark Herbert
E	52	CoulsonL.E..
W	46	Coverdale J.A.
W	72	Cowan D.J.
W	71	Cowan H.G.
W	26	Craig E Archibald
E	54	Crisp Frederick F
E	26	Curran Chas R
E	24	Curran Dennis
E	25	Curran William
E	101	Currington A H
W	70	Dalton V.M
E	110	Davey A.R.
W	141	Davies D
W	29	Davies Phillip
W	27	Davies P
W	30	Davies L.R.
W	28	Davies W.E
E	60	Dean Herbert D.
W	57	Dimond Alan
W	56	Dimond R.J.
W	11	Drury Frederick G
W	140	Dunne J
W	134	Dunstan D
W	142	Ellerman J.W.
W	36	Finch J A
E	53	Finlayson Charles
W	126	Flannagan J
W	127	Flannagan J.
E	56	Fletcher Fred
W	33	Foley F.J S
W	34	Foley John J.
W	35	Foley W.L.
E	107	Forrester R.
E	61	Gale A.M.
W	59	Gard J.H
W	58	Gard S.M.
W	77	Goad Jos
E	134	Godfrey E.C.
E	135	Godfrey H
E	144	Gore R.M.
E	80	Green A.J.
E	63	Greenwell W.J
E	41	Grigg Wm.J.
E	47	Grigsby Arthur
W	124	Hall G H
W	128	Hanley D
E	31	Harris James
W	125	Hegarty H.H.
E	42	Heron D.
E	133	Heron G.
E	132	Heron W.F.
E	126	Hills H.J
W	136	Hobill A.E
W	137	Hobill C.R.
W	24	Hobill G.W
W	25	Hobill H.J.
E	143	Hodgson W.R.
W	73	Hopkins L.L
W	75	Hurn Arthur
E	36	Jackson T.R.
E	35.	Jackson William J
W	67	Jeffrey T.A.
W	68	Jeffrey William M
E	49	Jenkins C.W.
E	48	Jenkins John Thom
W	22	Johannsen Henry N
W	21	Johannsen P.Norma
W	20	Johannsen Rupert C
E	106	Johnson Archibald
E	59	Johnston W.E
W	50	Jones David
E	37	Jones Thos, C
E	46	Jordan Chas L.
E	45	Jordan John
E	13	Kay Percy
E	14	Kay Thomas
E	112	Kean Thos
W	9	Kenneally J.H.
W	10	Kenneally James
E	113	Kilfoyle A
E	73	LaFranchi Peter
E	95	Lever F
E	15	McAndrew J.C.
E	16	McAndrewO.V.G
W	98	McCormack W
E	6	McDonald Thomas
W	15	McFarlane Willia
E	129	McGrath D.C.
W	26	McHenry R.H.
W	76	McHutchinson P.C
E	111	McIntyre J.A.
E	124	McKane D
E	70	McKay Wm M
W	42	McKinnon SisterA
W	41	McKinnon SisterR
W	1	McKinnon A.C.
W	2	McKinnon Norma
E	104	McLeod Hugh Har
E	99	McMahon J
E	38	McMillan H.A.
W	60	McPhee Edward A
E	50	McPherson W.O
E	28	Marchant T.E.
E	11	Marshall A.C.
E	10	Marshall R.H.
W	8	Martin A.M.P.
E	103	Martin F.W.
W	113	May Alan
E	9	May Archie
E	8	May Douglas G
E	7	May Henry V
E	23	May S.J.
E	83	Merritt A
E	82	Merritt Jesse
E	43	Miller R.P.
E	44	Miller Stanley
W	107	Mineali Wm
W	94	Miskin Ernest W
W	95	Miskin H.F.
W	13	Mitchell Frank T
W	[illegible]	Mitchell H
W	12	Mitchell Wm E.
W	139	Mounsey J.J
W	[illegible]	Murphy Jas
W	[illegible]	Murphy John
W	54	Naso J.
W	66	Newton Len.J
E	131	Newton W.D.
E	51	Norman Clarence
W	32	O'Connor J.T.
W	64	O'Rourke William
E	55	Owens E.E.
E	71	Packham H.C.
E	72	Packham J.T.
E	1	Parkin John
E	123	Perry A.H.
E	30	Peters A
W	120	Peters J
E	29	Peters W.J.
E	86	Phillips G.S
W	131	Phillips G.S
E	127	Porter G
W	119	Postlethwaite O
W	55	Prendergast E.P.
W	97	Rachinger A.W.
E	93	Ragatz Andrew
E	94	Ragatz Albert E
E	102	Rasmussen C
W	88	Redford G.B.
W	43	Redman Sister EM
E	98	Redman F
E	96	Redman Fred W
E	97	Redman John A
W	87	Richards J
E	57	Richards W.R.
E	34	Richardson H O
E	33	Richardson N,R
E	120	Richardson R
E	32	Richardson W.G.
E	78	Rickard ClarenceC
E	76	Rickard Harrie C
E	77	Rickard Roy S
W	61	Ridderford Ernest
W	62	Ridderford C V
W	63	Ridderford Wm TE
W	132	Risk D
W	133	Risk T T
E	27	Risk W
E	92	Robinson George
E	138	Robinson L.R.
W	116	Robinson R
E	81	Ross Donald
W	115	Ross M
W	117	Rowland F.L.
E	108	Rush Michael
E	84	Shaw Wm
W	121	Sheehan L
E	90	Slade M.J
W	65	Smith Arthur H
W	74	Smith Robert
W	83	Smith Wm T
W	123	Sonsee A
W	31	Sonsee Chas
W	130	Speed G.R.
W	129	Speed H
E	105	Spittle S.G.
W	85	Taylor Gilbert
W	89	Toll Cornelius H
W	91	Toll Frederick
W	90	Toll Richard
E	89	Treweek A.h
E	12	Vague Felix
W	138	Vanstone T.R.
W	[illegible]	Waddingham G.E.
W	81	Waddingham R.W.
W	101	Wade A
W	100	Wade G.
W	102	Wade S
W	86	Warren Ernest Bell
W	69	Warren Willie Chas
W	40	White Sister L.E.
W	48	White Eric C
W	47	White O.N.
W	108	Whitely Jos R
E	119	WiffinW.E.
W	106	Williams Geo D.
W	84	Williams J.F.
W	105	Williams J
W	49	Willmott J.J.
E	115	Wilson A.D.
E	85	Wilson T.W.
E	88	Wood A.P
W	44	Wood H W.
E	87	Wood S.G.
W	45	Wood T.H.
E	140	Yates W.J.
W	78	Yelland Albert E
W	114	
W	122	
W	138	
E	128	
E	139	

ASSESSMENT FORM
REGISTER OF SIGNIFICANT TREES

FAMILY Ulmaceae

BOTANICAL NAME Ulmus x hollandica L.

COMMON NAME Dutch Elm

TREE/STAND Avenue (X285) approx. 3 km long

LOCATION Roadside between Kingston and the Midlands Highway, north Creswick

SHIRE/CITY Shire of Creswick

OWNERSHIP Shire of Creswick

DESCRIPTION & BACKGROUND

AGE 70 CANOPY SPREAD 19.5 m

CIRCUMFERENCE 2.45 m HEIGHT 15.5 m

An impressive avenue of trees growing on the roadside south of the Kingston township. The condition of the trees vary from good to poor but all would benefit from a maintenance program. The few poor trees require removal and replanting. There is also the odd Ash, Lombardy Poplar, White Poplar and Blue Gums. A stone plaque reads: Shire of Creswick Avenue of Honor - A tribute to men and women who served in the great war 1914-1918.

J. CATEGORY(S) RECOMMENDED
2(7) 8(4)

K. PREPARED BY
J Hawker

L. COMMITTEE APPROVAL

CLASSIFIED

(RECORDED)

M. PHOTOS
Contemporary

N. LONGITUDE/ LATITUDE

O. OWNER NUMBER

P. INFORMATION NUMBER

Q. UNRESTRICTED ACCESS

RESTRICTED ACCESS

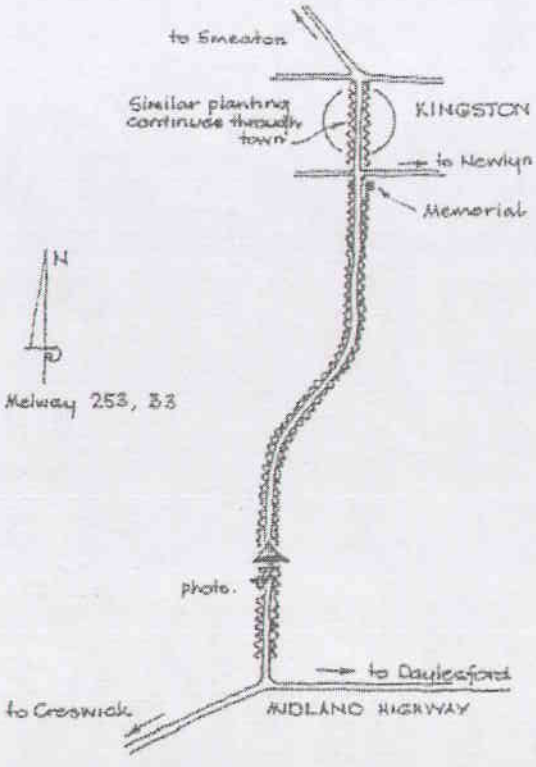
NO ACCESS

CATEGORIES

1. Any tree which is of horticultural or genetic value and could be an important source of propagating stock, including specimens that are particularly resistant to disease or exposure.
2. Any tree which occurs in a unique location or context and so provides a contribution to the landscape, including remnant native vegetation, important landmarks and trees which form part of an historic garden, park or town.
3. Any tree of a species or variety that is rare or of very localised distribution.
4. Any tree that is particularly old or venerable.
5. Any tree outstanding for its large height, trunk circumference or canopy spread.
6. Any tree of outstanding aesthetic significance.
7. Any tree which exhibits a curious growth form or physical feature such as abnormal outgrowths, natural fusion of branches, severe lightning damage or unusually pruned forms.
8. Any tree commemorating a particular occasion (including plantings by Royalty) or having associations with an important historical event.
9. Any tree associated with Aboriginal activities.
0. Outstanding example of species.

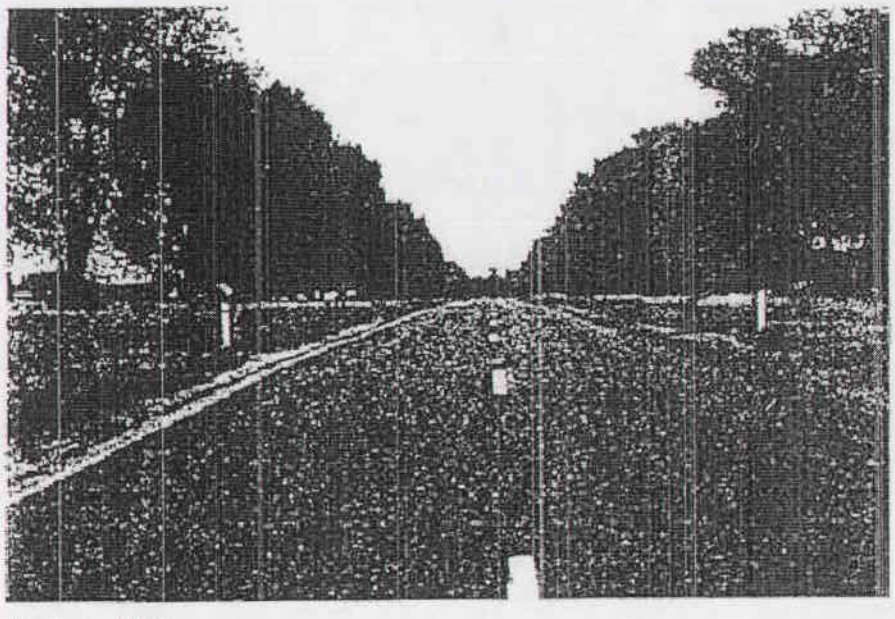
KINGSTON

LOCATION – On the Creswick to Smeaton Road, from the Midland Highway to Kingston.



SHIRE of CRESWICK
AVENUE OF HONOUR
A tribute to
our men and women
who served in
the Great War
1914 – 1918

Plaque on War Memorial.



January, 1986

SPECIES - Ulmus X hollandica
(Dutch elm)

HISTORY

The avenue was planted by the Creswick Shire Council in honour of all members of the Shire who served in the First World War. Later a large stone memorial was also erected in their honour and placed at the Kingston end of the avenue. The names of the servicemen were inscribed on cast iron plates placed at the base of each tree. Many of these plates have since been lost or broken.

DIMENSIONS

Avenue

Age: Approximately 65 years
Length: 3000m
Width: 32.3m
No. of trees: 293
Spacing: 20 - 20.6m

Tree Dimensions

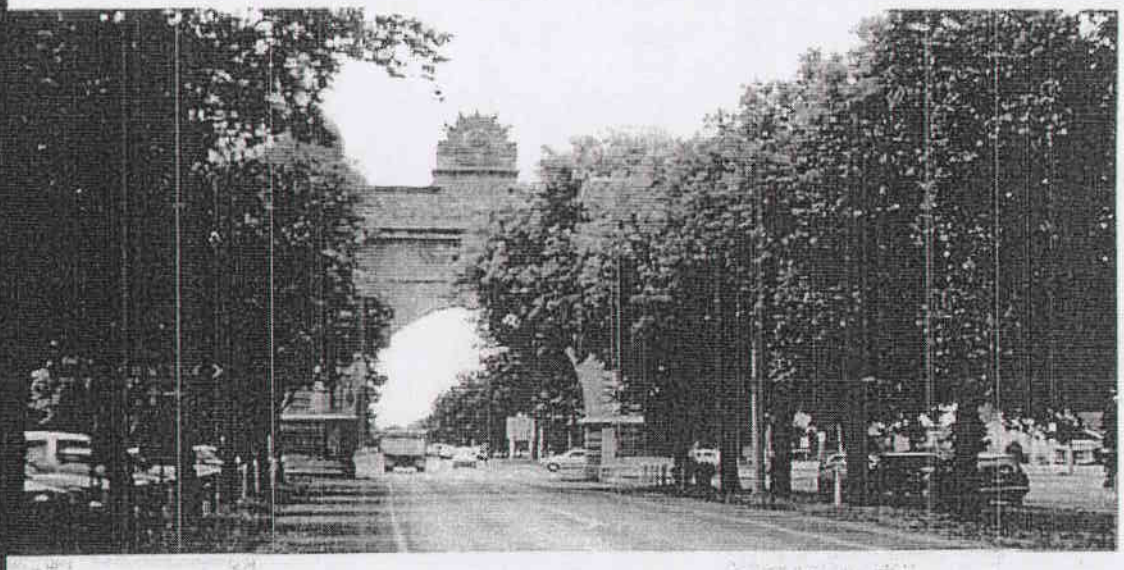
Height: 12 - 19m
Branch height: 2.5m
Girth: 1.7 - 2.4m
Canopy spread: 14.3 - 22m

AVENUE EFFECT AND CONDITION

Though the width and spacings are quite large, the avenue is effective to drive through because the trees are large and the avenue is virtually complete for the full 3km. Also the same species was used throughout, emphasizing the sense of uniformity and completeness. The avenue is "lengthened" by a similar planting which runs from the end of the avenue through the Kingston township.

Protecting historic designed landscapes

Heritage VICTORIA



Above: Ballarat Avenue of Honour and Arch of Victory is Australia's oldest and most famous avenue. Planting of 3,771 trees, mainly elms, began on the 3 June, 1917, and was completed in 1919. The Arch of Victory was officially opened on 3 June, 1920.

What makes a designed landscape significant?

Designed landscapes such as gardens, parks, cemeteries, avenues of trees and individual trees can be a valuable part of our heritage. They can be significant for a number of reasons:

- as works of art because of the beauty of their design;
- as examples of the work of noted garden designers or architects;
- as historical records, showing the principles of garden and cemetery design from an earlier era or demonstrating how a garden's layout can change over time;
- as a setting for buildings which are of architectural or historical importance;
- as a contribution to a cultural landscape, a component of a precinct or area of importance to our community;
- as the location of a valuable plant collection or of notable individual trees, shrubs or plants, and
- as commemorative plantings, or because of age, rarity or size or as outstanding examples of a species.

Gardens tell us about the time they were developed and about the way of life, tastes and interests of their original, and subsequent, owners or designers.

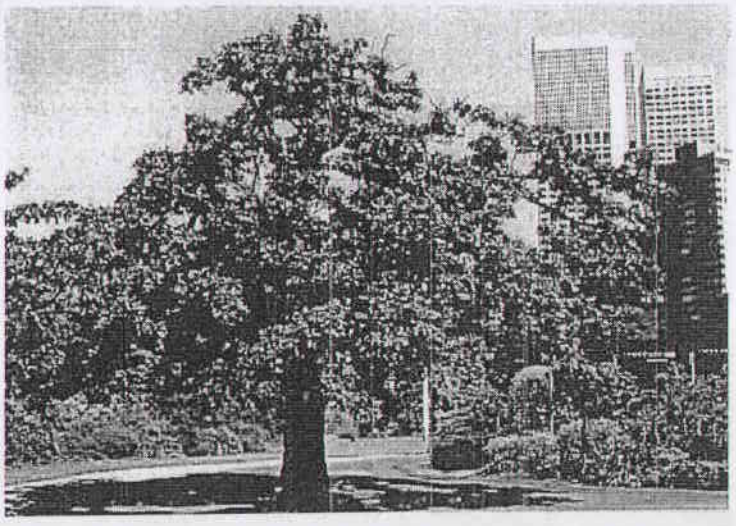
In assessing the heritage significance of a particular property we always consider the relationship between the house and the garden.

Are there many historic designed landscapes in Victoria?

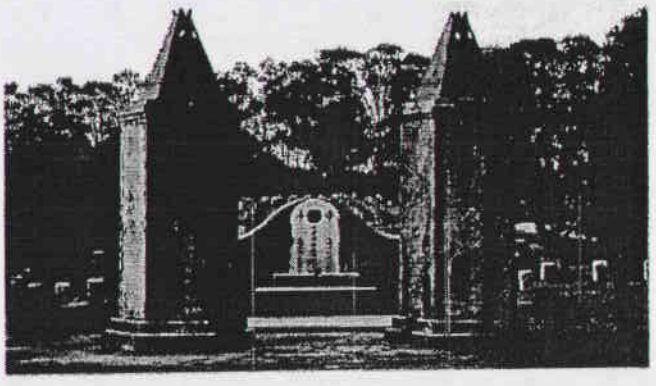
Victoria has an outstanding collection of designed landscapes. These range from large country estates to smaller suburban gardens, cemeteries, churchyards, avenues of honour and commemorative plantings. No two designed landscapes are the same and any works in those landscapes should always aim to retain their individual character.

This information leaflet tells you how Victoria cares for its historic designed landscapes, orchards, gardens and trees. It describes how the Heritage Council decides whether a designed landscape is of historic importance or not and explains briefly the laws that can be used to protect it. This leaflet also gives some information about researching the history of a garden and some hints on developing a plan for its conservation.

This document does not cover other aspects of conservation, such as natural landscapes and environments or land and farm management. These are protected under other laws and regulations.



Left: The Federal Oak was planted in the Parliament Gardens in February, 1890, to commemorate the Australasian Federal Convention in Melbourne by Sir Henry Parkes, Premier of New South Wales and a key figure in the federation movement.



Above: The site for the Beechworth Cemetery was chosen in 1854. Chinese funerary towers, the most elaborate in Australia, form an entrance to the Chinese burial ground. In 1900 an ornamental fountain was placed near the entrance gates. A report in 1906 said it was "one of the most picturesque burial grounds in the provinces".

How are historic landscapes protected?

Victoria's Heritage Act (1995) protects places of cultural and heritage significance by including them on the Victorian Heritage Register. Gardens, cemeteries and individual trees are among the many places on the Register. Once placed on the Register, they are:

- legally protected from ill-considered alterations, and
- eligible for financial assistance for restoration work through state funding programs.

Under the Planning and Environment Act (1987), municipal and shire councils can also protect designed landscapes by including them in their local planning schemes.

What protection and restrictions are placed on a garden when it is registered? Do I need permits to undertake works?

Gardens are in a continuous process of growth and decay. They depend on regular conservation and maintenance for their long-term survival. They need to be constantly renewed. Inclusion on the Victorian Heritage Register recognises that changes are a part of conserving our landscape heritage.

You will not need a permit for routine repairs and maintenance or for emergency or safety work.

The processes of gardening, weeding, mowing, pruning, hedge maintenance and planting renewal are acknowledged as vital to the welfare of gardens.

In adding a place to the register, the Heritage Council adopts a statement of cultural heritage significance which identifies the 'hard' elements, such as paths, gates and steps, and 'soft' elements such as trees and shrubs, significant to that particular place.

For many gardens significant elements will include buildings and structures, planting themes - such as rose gardens, avenues or plantations - collections of plants, the character of the designed landscapes and individually significant trees. These are all protected.

If you need to implement planting changes or to make structural changes to the protected elements, you should check with Heritage Victoria to see if permits are required.

Are there permit exemptions?

Often, exemptions from the need for a permit for alterations are granted to places listed on the Register.

Common exemptions are:

- the process of gardening; mowing, hedge clipping, bedding displays, removal of dead plants, disease and weed control, emergency and safety works and planting to retain existing landscape character;
- replanting to conserve the landscape character, such as avenues and rows of trees;
- management of trees in accordance with Australian Standard *Pruning of amenity trees AS 4373*;

removal of plants listed as State Prohibited and Regionally Controlled Weeds in the *Catchment and Land Protection Act 1994*, and

- repairs and maintenance to hard landscape elements.

I think my garden may be historically significant. What should I do?

You will need to determine whether any plant is rare or an important specimen and whether the garden or elements of it have historic, scientific, aesthetic or social significance.

Your first step should be to stabilise structures and plantings to prevent deterioration or loss. You should also ensure that drainage is working efficiently and cut back foliage that is damaging structures or other important plants. The long-term survival of gardens depends on constant maintenance and on informed and sensitive renewal work.

At the same time you need to adopt a conservation management plan.

Why do I need a conservation management plan?

Before you undertake any substantial work on an historic garden you need to know about the state of the garden now and how it developed to this point. You need to consider how you might best restore or conserve it. You may need to use specialist skills in history, botany, architecture, horticulture or archaeology to help you.

A conservation plan would normally include:

- a survey of existing conditions;
- historic information on the origins and evolution of the garden;
- analysis of comparative examples in Victoria;
- a statement of why the garden is culturally significant, and
- an outline of the policies needed to conserve the garden.

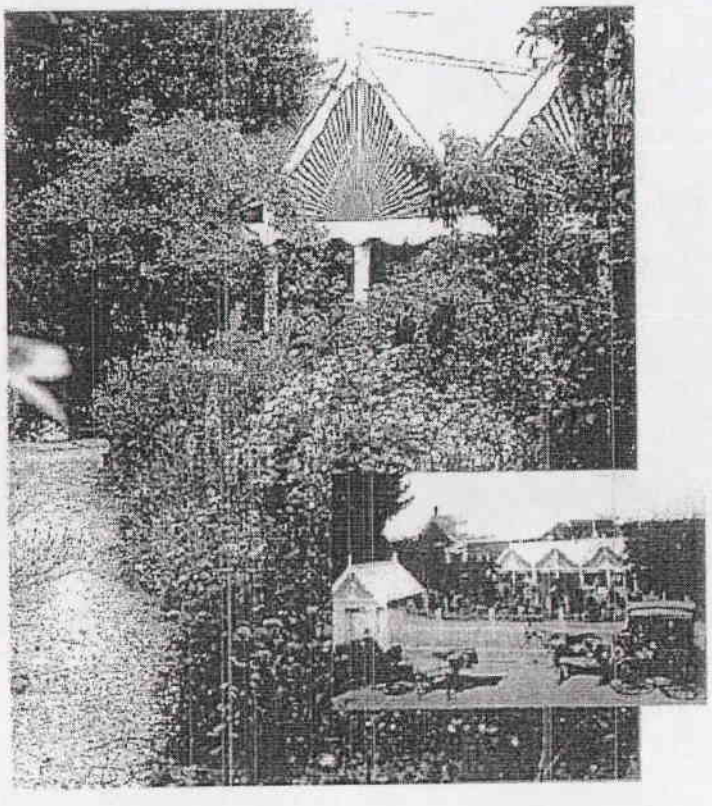
How important is it to make a record of existing conditions?

Designed landscapes are always changing and evolving, so it is essential that you start with an accurate record of existing conditions. You could begin with a photographic record of the garden. Your next step should be to prepare an existing conditions plan at an appropriate scale (for example 1:100 or 1:500). It should include all structures, fence lines, paths, water features, garden beds and plantings, including stumps and depressions. The plan should also locate overhead and underground services and identify important views. If professional preparation is not possible sources such as title and house plans, measurements on the ground, sewerage and water supply plans held by local authorities, topographic maps and aerial photographs will assist. You could also consult the planning department at your local council which may have information available.

Identify all plantings with botanical names where possible and cultivar

Below: Belmont was built by James Frazer Watkin in 1858 and is occupied and cared for by his decendants. The timber house was built in 1861. A major addition and the distinctive sunburst verandah was added in 1886. From the 1860's the extensive garden was opened to the public for selling produce. It includes ornamental lakes, an orchard, flower beds, lawns, vineyard and a vegetable garden.

Below inset: View of Belmont about 1890.



Below: The site for the Wermambool Botanic Gardens was reserved in 1866 and developed from 1877 to a design by William Guilfoyle, Director of the Melbourne Botanic Gardens. The bandstand was built about 1920 and the gardens retain an important collection of plants and historic features.

names if relevant. You might need several months to complete the plant survey so that bulbs and flowering plants can be identified.

Take care to identify plants accurately. If in doubt you can forward flowering material to the National Herbarium of Victoria or consult with a horticulturist or botanist.

What about research?

In addition to investigating the landscape design, you could undertake historical research on its origin and development.

Inclusion of documentary material, including historic photographs, and interviews with previous owners or people who knew the property, will greatly enhance the value of the conservation plan.

Where will I find sources for my research?

Historical research on designed landscapes involves visual and written sources.

Often there will be photographs, home movies, aerial photographs, paintings or sketches which record aspects of the garden. There might be garden, cemetery or avenue plans.

Written sources can include official records held by government or local government bodies - land title records, rate books, building permits, sewerage and water supply plans.

Among the property's records or those held by previous owners you could find auction notices or advertisements, receipts, nursery catalogues, gardening books, magazines, journals, diaries or gardeners' notes.

Gardens are often mentioned in private correspondence. Photographs and descriptions of unusual or grand gardens are often featured in weekly magazines. You could consult indexes at the State Library of Victoria and files held by cemetery trustees.

How should I organise the results of my research?

When compiling information on the designed landscape's development, you should probably divide your research into periods of ownership or management. This will help you record who undertook the development and who was responsible for the changes.

Major alterations to houses and gardens often coincide with a change in ownership or the arrival of a new family member.

You can prepare overlay plans for each period using the information you have assembled. You can compare these with the existing conditions plan to note all the changes.

Putting the conservation plan into practice.

Conservation plans acknowledge that gardens change and grow.

A good plan is tailored to protect the particular heritage significance of a place and will recognise existing conditions and constraints. Trees grow, microclimates develop and it may not be possible or desirable to reconstruct earlier planting schemes. Plant disease, problems with weed species, or changing soil conditions may also prevent planting with original species and you may need to substitute other appropriate plants.

The availability of funds will also influence putting the plan in to practice.

Despite these problems, careful research and conservation planning will allow you to respect and protect significant features of the garden which may not have been obvious to you originally.

What about documenting the changes you make?

This is important! You are making your own contribution to the history of your designed landscape.

Keep a photographic record, site plans and a diary to detail plantings and conservation works. Note the names of contractors, consultants and the origin of the plant material.

How can Heritage Victoria help?

Places on the Victorian Heritage Register are eligible for financial assistance from the Heritage Fund in the form of grants, and low interest or interest free loans. Assistance is also available in remissions in rates or land tax so that funds can be redirected to urgent work.

Within Heritage Victoria are officers with a range of specialist skills available to owners of registered places who can provide advice and lists of heritage consultants and tradesmen.

MORE INFORMATION

Heritage Victoria has published a number of leaflets about the protection and care of Victoria's heritage places that together form the Victorian Heritage Manual.

If you are interested in other topics please contact Heritage Victoria on telephone (03) 9655 6519 or facsimile (03) 9655 9720.

Heritage Victoria has also published several books. They are available from the Department of Infrastructure Customer Service Centre on the concourse level, Nauru House, 80 Collins Street, Melbourne 3000, telephone (03) 9655 8830, facsimile (03) 9655 8847.

The Heritage Council website is www.heritage.vic.gov.au Heritage Victoria's website is www.doi.vic.gov.au

Heritage
VICTORIA

Residential Customers
General inquiries 13 2114
Service difficulties 13 2412

Business Customers
All inquiries 13 2334

Ballarat Business Centre
Norman Street Wendouree
Victoria 3355
PO Box 572 Ballarat Vic 3353
Facsimile 03) 5327 2299
www.powercor.com.au

17 December, 1999

Our Reference: B20676

Mr Shane Jeffrey
PO Box 254
CRESWICK VIC 3363

Dear Mr Jeffrey

BUDGET ESTIMATE FOR POWERLINE RELOCATION AT KINGSTON

I refer to your discussions with our Network Customer Connections Officer, Mark Freeman regarding a Budget Estimate for the costs of relocating electricity supply at Kingston

From the conclusion of all contractual negotiations, and subject to third party constraints, typically a minimum 5 months lead time will be required to finalise the design work, arrange material manufacture and delivery, allocate labour and equipment, and complete all planning processes before the supply can be rearranged.

The Budget Estimate consists of:-

- **Service Charges - Non Contestable Works.**
  Powercor has determined that according to legislation, licence, code and safety requirements, any work required on Powercor's live assets must be carried out by Powercor personnel. As all the above works are required on live assets then these works are not contestable, however, our price for this work is still very competitive and reflects our policy of delivering the best price to you whatever the circumstances. The estimated Charge to be applied by Powercor for these works is provided below as "Service Charges - Non Contestable Works".

- **Network Connection Service Fees** are the fixed costs Powercor applies to each electricity supply project. The fees are to meet the costs of Powercor's work to connect your project to the distribution network and are independent of the Service Charges - Non Contestable Works.

The Budget Estimate:

Service Charges - Non Contestable Works	$80,000
Network Connection Service Fees	$500
TOTAL CONTRIBUTION BY CUSTOMER	$80,500

Powercor Australia Ltd
ACN 064 651 109

How to Proceed

This Budget Estimate is to provide you with **indicative costs** for the electricity supply to your property. It is not a quote from Powercor nor does it constitute an *Offer for Network Connection Services.*

If you want to obtain a quote from Powercor for the electricity supply to your property please read the enclosed *Customer Information Sheet - Budget Estimates (PCA4143.A1)* and forward a written request for an Offer for Network Connection Services. Processing of your Offer for Network Relocation Services will not commence until we have received your written request.

If you require more information please contact Mark Freeman on telephone (03) 5327 2225.

Yours sincerely

Michael Belcher
Customer Connections Manager
Ballarat

enc
1. Customer Information Sheet : Budget Estimates (PCA4143.A1).
2. Customer Information Sheet - Customer Initiated Augmentation Works (PCA4143.A2).

Powercor Australia Limited
(ACN 064 651 109)

CUSTOMER INFORMATION SHEET : BUDGET ESTIMATES

This Customer Information Sheet is to provide an explanation of the process and factors used in preparing a Budget Estimate for an electricity supply to a customers property. It also explains some "rules" that that Powercor will apply in regard to the provision of a Budget Estimate.

1 Objective

To assist customers intending to connect to the Powercor distribution network, Powercor will provide a Budget Estimate for the *Augmentation* works and Network Connection Services. The Budget Estimate will be based on the most likely method and most probable route of augmenting (extending or upgrading) the distribution system to provide an electricity supply to the customer.

The Budget Estimate is provided for the customers planning purposes, it is not an Offer for Network Connection Services nor is it a Quote for the Competitive Services.

2 Content of the Budget Estimate

The Budget Estimate is to provide the potential customer with an indication of likely Fees and Charges associated with the project. The Budget Estimate is provided in terms of *Competitive Service Charges* and *Network Connection Service Fees* plus *Cost Sharing Rebates* if applicable and any other charges that may apply.

2.1 Basis of Budget Estimate

The Budget Estimate will be determined on the following basis:

2.1.1 Method of Supply

The Budget Estimate is based on the most likely method and most probable route of extending or upgrading the distribution system to provide an electricity supply to the customer. The method of distribution, *Rural* or *Urban*, normally used in the area will be the guide for "the most likely method of distribution". The information provided by the customer and local Powercor knowledge will provide the guidance for "the most probable route" of any new lines.

The final route and method of providing supply is influenced by factors such as existing Powercor assets, trees, easements, terrain and by the approval of other Authorities. A detailed technical assessment of the site and Powercor assets will be required before an Offer for Network Connection Services will be prepared but is not undertaken for a Budget Estimate.

2.1.2 Tree Clearing

Although Powercor endeavours to minimise the need for initial and ongoing tree clearing to preserve the natural environment, trees must be cleared properly to minimise interruptions to supply, the risk to public safety and losses from bushfires.

No costs for Tree Clearing will be included in the Budget Estimate.

2.1.3 "Free" Easements

All estimates are subject to the granting of "free" easements where the supply assets cross private property. The approval of appropriate authorities may also be required for some line routes.

The Budget Estimate is based on the assumption that free easements and any other approvals will be obtained.

2.1.4 Third Parties

Any constraints placed on the project by third parties may cause additional cost and delay to the expected supply availability date.

The Budget Estimate is based on the assumption that there will be no third party constraints.

2.1.5 Civil Works

The budget estimate does not include any costs for civil works; including trenching, excavations and road crossings; for the installation of underground cables.

The customer is responsible for arranging the work and the costs of all civil works.

2.1.6 Electrical Load

The Budget Estimate is prepared for an electrical supply nominated by the customer. In general a domestic load will be 6 kilowatts at 240 volts single phase.

For Commercial or industrial supplies the load quoted by the customer could have a substantial impact on costs.

The customer will need to provide detailed advice on the potential load and usage patterns before the preparation of an Offer for Network Connection Services.

2.1.6 Accuracy of Budget Estimate

The Budget Estimate is prepared on the basis of the information supplied by the customer without detailed assessment or field visits.

As the Budget Estimate is based on "the most likely method and most probable route" of augmenting the distribution system and on **average costs for undertaking the type of work** there may be a variation with the actual completed costs for a specific project. The Budget Estimate, therefore, has an accuracy limited by the information available to prepare it.

The actual final cost of the project will be influenced by factors such as the actual method of supply, the route of any new line, existing Powercor assets, actual electrical load, trees, easements and terrain.

2.2 Network Connection Service Fees

Based on "the most likely method and most probable route" of augmenting the distribution system, the Network Connection Services estimate will be accurate as the costs are based on the Schedule of Fixed Charges and relate to the type of connection(s) to the distribution system and the type and length of the augmentation.

If the final method of supply differs from that anticipated there will be a change in these fees to match the work actually required to connect an electricity supply to the customers property.

2.3 Competitive Service Charges

The estimated price for the Competitive Services for the Budget Estimate is based on our experience of the costs for project management, design, construction and supply of materials for projects of a similar nature to the customers.

The Competitive Charges will be based on an estimate of the average Design, Construction (including all materials) and Project Management costs for the particular type of project and are intended to be **"indicative costs" only.**

2.4 Cost Sharing Rebates

The Budget Estimate will provide detail on any *Cost Sharing Rebates* if applicable.

2.5 Guarantee

The guarantee is required for a period of three years and is equal to an amount of five percent (5%) of the value of the Competitive Services or is provided through additional Contractor Supervision.

2.6 Powercor Contribution (Connection Incentive)

For particular types of augmentations Powercor may make a contribution to the cost of the work. The Powercor contribution is known as the Connection Incentive. The Connection Incentive will be paid after the project is connected to the distribution network and the customer takes supply.

The amount of the Powercor Contribution will depend on the actual cost of the work performed,

the location and electrical load connected. The Connection Incentive will be paid to the customer irrespective who undertakes the competitive works.

The Connection Incentive will be applied in the following way:

- **Option 1** - Powercor will deduct the ***Connection Incentive*** from the total amount payable to Powercor excluding Cost Sharing Rebates if applicable. The customer will contribute the balance of the cost of the work.
- **Option 2A & 2B** - Powercor will pay the ***Connection Incentive*** when the augmentation is connected to the distribution system and the customer takes supply.

The amount (if any) of the Connection Incentive will be provided in the Budget Estimate letter to the customer.

2.7 Tender Costs

An estimate of the Tender Costs will be provided in a Budget Estimate and is based on our Panel Tender Process. The costs are based on the number of hours work required plus any other cost incurred such as postage, printing etc.

Actual costs would be invoiced to the customer on completion of the Tender Process.

2.8 Exclusions

The Budget Estimate generally will not include an amount for Tree clearing and Civil Works.

The details of any other exclusions will be specifically mentioned in the letter to the customer.

3 Number of Budget Estimates

One Budget Estimate will be provided free of charge. Where more than one Budget Estimate is requested (i.e. where the customer wants to explore options that are not consistent with the normal distribution method in the area), a fee for this service will be charged for the second and subsequent requests. The charge will be based on the time to prepare the estimate and any associated activities including postage and travel if required.

4 Supply Availability Date

As the customer has a choice in who undertakes the Competitive Services, Powercor cannot commit to a date for supply to be available at the time of the Budget Estimate. A date will be agreed for the electricity supply to be available to the customers point of supply as part of the process of the Offer for Network Connection Services.

5 Additional Costs

There are some costs that are not included in the cost for extending or upgrading the distribution network to make an electricity supply available to the customers property. The costs are not included in the Budget Estimate.

5.1 Connection Fee

A connection fee will be applied in addition to any costs for extending or upgrading the distribution network. The connection fee will be included in the customers first electricity account.

5.2 Special metering or servicing

An additional charge will be applied if special or non-standard metering and/or servicing is required. Powercor will need to provide more details regrading applicable costs and payment method if required.

6 Information to the Customer

The customer should receive the following :

Budget Estimate Letter (PCA4143.C2) when the estimate has been prepared. The letter will also contain the following Powercor documents:

- Customer Information Sheet - Customer Initiated Augmentation Works (PCA4143.A2); and
- Customer Initiated Augmentation Works: Option Selection Form (PCA4143.B2).

If you require more information or want to proceed with a *Budget Estimate* or an *Offer For Connection Services* please contact Powercor.

Powercor Australia Limited
(ACN 064 651 109)

CUSTOMER INFORMATION SHEET: CUSTOMER INITIATED AUGMENTATION WORKS

The Objective of this Customer Information Sheet is to provide a **brief** explanation of process for an Offer for Network Connection Services when an *Augmentation* is required to provide an electricity supply to a customer from the Powercor distribution system. Where an augmentation is not required to provide a Network Connection for a customer the policies relating to *Line Of Mains* connections apply.

The Customer should carefully read this information sheet to ensure that they understand the processes involved in Customer Initiated Augmentation Works. If the Customer requires any additional information, or wishes to discuss the contents of this Information Sheet, they need to contact Powercor.

1 Customer Options for Augmentation

The customer has options on who undertakes some components of the work. There are three options on who does the work for a customer. Each option has an impact on the type of **Offer for Network Connection Services** made by Powercor.

The rules for the electricity distribution industry in Victoria give a customer the option of being able to seek prices from suppliers other than the distribution companies for the provision of the contestable services for augmentation works. The **Network Connection Services are not contestable,** however, **design, construction and material supply (Competitive Services) are contestable.** Powercor is very competitive for the contestable services.

As a general rule, the customer is responsible for organising and funding any tree clearing required for the augmentation. Network Connection Services do not include tree clearing. Tree clearing may be included with the Competitive Services if specifically requested by a customer and agreed to by the service provider.

CUSTOMER OPTION 1

Powercor undertakes the Project on behalf of the customer and provides an all inclusive price for the Network Connection and Competitive Services.

Powercor undertakes the project consisting of the normal Network Connection Services, plus Contractor Supervision in lieu of a guarantee (See 3 below) and arranging with Powercor Services (the contracting arm of Powercor) for the Competitive Services.

Powercor will provide a price for the augmentation on an all inclusive basis for the Network Connection and Competitive Services plus any Cost Sharing Rebates if applicable. The customer does not need to be involved in the details of the process of arranging or coordinating the Competitive Services. Powercor will ensure quality compliance of the work performed through audits and ***Contractor Supervision***. As a fee for the *Contractor Supervision* will be included in the overall costs the customer does not need to provide a Commercial Guarantee.

Supply Availability Date: Powercor will provide a firm date for the electricity supply to be available to the point of supply for the customer.

CUSTOMER OPTION 2

Option 2 variants (2A and 2B), described below, are offered to Powercor's customers to meet the rule to give a customer the option of being able to

seek prices from suppliers other than the distribution companies for the provision of the contestable services for augmentation works. Option 2B is only available where the estimated cost of the **construction labour and plant** is greater than $5000. This limit has been set by the Office of the Regulator General. Customers will be advised if their project is above this value before they need to select which option they want to pursue.

With Option 2 variants 2A and 2B the customer will be directly engaging the contractor(s). Contractors engaged by a customer must be recognised by Powercor. Powercor will determine the requirements for access to it's assets after taking into consideration legislature, licence, code and safety requirements. Where the requirements for access cannot be met, then the work will not be contestable. Where the requirements are met for access to Powercor assets, arrangements must be made in accordance with Powercor procedures.

For both variants of Option 2 the Network Connection Services are the same. Powercor undertakes the normal Network Connection Services, plus Contractor Supervision in lieu of a guarantee (See 3 below).

Powercor will provide a price for the Network Connection Services plus any Cost Sharing Rebates if applicable. Powercor will ensure quality compliance of the work performed through audits and ***Contractor Supervision***. As a fee for the *Contractor Supervision* will be included in the overall costs the customer does not need to provide a commercial guarantee.

Option 2A

Powercor to provide charges for Network Connection Services and the customer arranges all other works.

Competitive Services: The customer arranges all Competitive Services. The customer can seek competitive prices or directly engage any Powercor **Recognised Contractor** to perform the work.

Supply Availability Date: Powercor cannot provide a firm date for the electricity supply to be available to the customer as it will not have control over the contractors performing the work. The customer will need to ensure that they have agreed completion dates with their contractors.

Option 2B

Powercor provides the costs for the Network Connection Services and the customer requests Powercor to seek prices for all other work. The customer manages the project and contractors.

Competitive Services: The customer requests Powercor to seek bids from a list of ***Recognised Contractors*** to perform the work. Powercor will then recommend to the customer who the contractor should be. However, the customer has the final say in who the contractor will be by arranging a contract with the contractor(s). The customer will manage the contracts and manage the contractors. Powercor will charge the customer for the costs associated with seeking prices for the work. These costs are additional to the Network Connection Services Fees.

Supply Availability Date: Powercor cannot provide a firm date for the electricity supply to be available to the customer as it will not have control over the contractors performing the work. The customer will need to ensure that they have agreed completion dates with their contractors.

2 Fees and Charges

2.1 Network Connection Services

The fees for the activities associated with any augmentation that **can only be provided by Powercor** will be collected in five components:

1. Project Fee;
2. Network Fee;
3. Tie-in Fee;
4. Other Fees and Charges; and
5. Cost sharing Rebates (if applicable, see section 7 below).

The work required will vary between different types and sizes of projects. The Project, Network and Tie-in Fees are based on the average time taken to complete the activities associated with the particular type and size of project. The amount of the fee will vary between the different types and sizes of projects. The Other Fees and Charges are based on the actual costs incurred by Powercor in providing the service.

The Network Connection Services Fees will be the same for any particular project and are independent of the Option selected by the customer.

Terms of Payment

The terms of payment for the Network Connection Service Fees are:

- **Project Fee** is paid at the time an Offer for Network Connection Services is requested.
- **Network Fee** is paid when the customer accepts the Offer.
- **Tie-in Fee** is paid at Offer acceptance .
- **Other Fees and Charges** are to be paid prior to Tie-in.
- **Cost Sharing Rebates** are to be paid at contract acceptance.

The Tie-in of the augmentation will not occur until all fees and charges payable to Powercor have been paid.

2.2 Competitive Services

The competitive services include:

- Project Management;
- Design which includes survey and drafting; and
- Construction which includes the provision of all materials and "as constructed" plans.

Terms of Payment

As Powercor is not the sole provider of these services, the payment options for any charges will be by direct negotiation between the customer and the actual service provider. Unless Powercor is the service provider it will not be involved in any negotiations regarding payment options for the customer.

Where Powercor is providing the Competitive Services, it offers its customers a range of payment options. The options available include progressive payments.

3 Quality Control and Guarantees

Quality control is a major issue for Powercor. To ensure that existing and new customers will continue to receive a reliable electricity supply, Powercor has the following Quality Assurance process in place:

1. ***Powercor undertaking compliance audits of the work during and/or at the end of the work performed by the customers' contractor(s).***

Powercor will ensure that the quality of the work performed by all contractors meets **the specifications provided by Powercor.** The costs for these audits are included in the Network Connection Service Fees. Note: these audits are NOT Contractor Supervision audits.

2. ***The customer providing a guarantee by some form of commercial instrument for an agreed period.***

As part of the Quality Assurance Program of Powercor it requires the customer to provide some form of "guarantee" of the performance of the part of the distribution system installed by the customers contractor. Options are available to the customer to guarantee the contractors work. The requirement, the amount and form of any guarantee is based upon an assessment of the risk of failure due to poor quality work or materials, and the financial exposure of Powercor to rectify any problems.

The purpose of the guarantee is to ensure that Powercor will not be exposed to the cost of rectifying defective work or materials installed by the customer's contractor. A commercial instrument that covers the period of the guarantee is required to ensure that Powercor has access to funds, if required, even if the customer ceases to exist. The most common forms of commercial instrument are a Bank Guarantee; a refundable deposit; or insurance.

The customer will provide a guarantee for a period of three years of an amount equal to five percent (5%) of the cost of the Competitive Services. Contractor Supervision is an alternative to a commercial instrument.

4 Obtaining an Offer for Network Connection Services

To obtain an Offer for Network Connection Services a customer will need to:

1. Obtain an estimate for the Project Fee from Powercor.
2. Pay the Project Fee.

3. Complete the Customer Option Selection form.
4. Send the completed Customer Option Selection form to Powercor.

Time Frames

The Customer should receive an Offer for Network Connection Services within 20 business days of Powercor having all the information it reasonably requires to make an offer. The twenty days is conditional on Powercor having all the information it reasonably requires to prepare an Offer. Depending on the size, scope and complexity of the project and the Offer Option selected by the customer the information required to make an Offer varies substantially. Powercor will keep the customer informed of the progress of the Offer if this time frame needs to be varied.

5 Easements

It is Powercor's responsibility to obtain free easements across private lands. While the involvement of the new customer in the negotiations can help greatly, Powercor CANNOT leave the new customer to obtain easements independently.

The standard Network Connection Service Fees contain an allowance of time for the obtaining of easements. The allowance is based on a simple straight forward process without any complications, that is, sending the easement form to the land owner for signature. Where there are any complications in an easement negotiation a ***Consultation Fee*** will be charged for all time and costs incurred in obtaining easements.

6 Tree Clearing

All new customers are responsible for all tree-clearing costs. The Customer is fully responsible before and during construction for the cost of any clearing of trees, other materials or structures required along the route by Powercor or by the customers contractor.

7 Cost Sharing

Powercor has a set of principles that apply to cost sharing between customers. A new customer taking a supply from existing assets contributes to the cost of the assets funded by other customers. Where Cost Sharing Rebates are collected by Powercor they are transferred to those customers who contributed to the initial cost of the shared assets of the extension. Powercor receives no benefit from the collection of Cost Sharing Rebates. Cost Sharing is applied on a progressive share basis and only applies with in particular customer segments and for a defined set of assets.

8 Connection Incentives

For some types of augmentations Powercor makes a contribution to the cost of the work as a ***Connection Incentive***. Where Powercor does contribute to the cost of the work the contribution is paid independently of the provider of the Competitive Services to the party signing the Network Connection Services Contract (the Customer).

For all Customer Options Powercor will pay the ***Connection Incentive*** when the augmentation is connected to the distribution system and the customer takes supply. The Connection Incentive will be paid in instalments to the Customer.

If you require any further information or wish to initiate an Offer for Network Connection Services please contact Powercor.

ELM LEAF BEETLE (*Pyrrhalta luteola*)

If you notice any signs of the Elm Leaf Beetle or its symptoms please contact the following people in your municipality:

Central Goldfields Shire Council telephone 5461 0655 or mobile 0419 318 874	Leigh Robertson	title?
City of Ballarat telephone 5320 5761 or mobile 0419 131 746	David Grant	Arboriculture Officer
City of Greater Bendigo telephone 5434 6433	Mitch Kemp	Senior Arborist
City of Greater Geelong telephone 5227 0827	Ian Rogers	title?
Golden Plains Shire Council telephone 5220 7134	Andrew Bishop	Environmental Officer
Hepburn Shire Council telephone 5348 1633	Andrew Bourke	Manager Operations
Macedon Ranges Shire Council mobile 0407 127 396	Geoff Waldon	Parks Co-ordinator
Moorabool Shire Council telephone 5366 7100	Alan May	Plantations/Environment Officer
Mt Alexander Shire Council telephone 5471 1739 or mobile 0419 389 689	Ian Carmen	Parks Manager
Pyrenees Shire Council telephone 5349 2000	Heidi Nelson	Contracts Officer