

# CONCEPT LANDSCAPE PLAN FOR WAVERLEY FLORA PARK QUARRY ROAD ENTRANCE AND AVENUE OF HONOUR CONCEPT PLAN

*Prepared for the City of Clarence*

AUGUST 2017



# **LANDSCAPE CONCEPT PLAN FOR WAVERLEY FLORA PARK QUARRY ROAD ENTRANCE AND AVENUE OF HONOUR**

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Inspiring Place Pty Ltd  
Environmental Planning, Landscape Architecture,  
Tourism & Recreation  
210 Collins St Hobart TAS 7000  
T: 03) 6231-1818 E: [info@inspiringplace.com.au](mailto:info@inspiringplace.com.au)  
ACN 58 684 792 133



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# SECTION 1

## BACKGROUND

### 1.1 CONTEXT TO PROJECT

The *Waverley Flora Park Reserve Activity Plan 2013-2018* was adopted by Council in May 2013. The Plan recommended that Council develop a Master Plan for the proposed Soldiers Memorial Park and Avenue of Honour based on historical research and extensive community consultation.

Heritage Consultant John Wadsley was engaged by Council to undertake historical research relating to the former Bellerive Rifle Range and the Avenue of Honour established almost 100 years ago. The report *Master Plan for Waverley Flora Park – Former Bellerive Rifle Range and Avenue of Honour 2015* provides the historic context of the former quarry and rifle range. A summary of the key findings from the historical research is outlined below.

Aboriginal people (one of the Oyster Bay clans) are known to have accessed and used the site for traversing, shelter and food.

Land grants in the general area were issued to settlers from the 1830's. Quarrying for sandstone started in the mid 1840's and was used for buildings in Hobart, Melbourne and New Zealand (including Wirksworth in Wentworth Street) - ownership of the quarry changed hands and the quarry operations closed in 1894, then re-opened before being scaled down by 1921.

In 1905 the Bellerive Rifle Club was established, initially near Wentworth Street in Howrah, but due to complaints from neighbours, new sites for the Rifle Club were investigated. The new rifle range at Mornington was surveyed in 1916 and extended from the northern end of Quarry Road and beyond there towards Knopwood Hill – some 242 acres of land in total.

The Bellerive Rifle Club conducted working bees to clear the land, dig target pits and set up the shooting area. The rifle range was officially opened in November 1917.

In September 1918, the Bellerive Rifle Club planted an avenue of trees to remember the service and sacrifice by its members in the Great War.

Some 23 macrocarpa cypress (*Cupressus macrocarpa*) were planted at the northern end of Quarry Road. The trees no longer remain.



The above photograph was taken in 1951-52 prior to major housing development in Warrane. It suggests that the original Avenue of Honour tree plantings (darker trees being *Cupressus macrocarpa*) were located towards the northern end of Quarry Road. (Photo from the Maritime Museum of Tasmania Collection provided by John Wadsley)

The Club remained active with shooting events (inter-club and regional) for about 40 years but by 1960 the Army decided it was no longer tenable given the development of houses within Warrane and sold the land to the State Government for residential development. The balance of the land was put up for public tender, but with no offers, Council purchased the land for public purposes in 1962 and it was integrated into the Waverley Flora Park.

The Council are keen to commemorate the former Bellerive Rifle Range and those that served in World War 1 and World War 2. The centenary occurs on the 7<sup>th</sup> September 2018 being 100 years after the official opening.

The Council is also keen to address the limited provision for access and parking at Waverley Flora Park. The top end of Quarry Road provides the opportunity to enhance access in the future.

Council engaged Inspiring Place to investigate the options for the Avenue of Honour at the entry to Waverley Flora Park or within the vicinity of Quarry Road.



## **1.2 PURPOSE OF THE PROJECT**

The purpose of the project has been to:

consult with the local community and key stakeholders about the potential to improve access into Waverley Flora Park; and

investigate the opportunities for reinstating and interpreting an Avenue of Honour to mark the centenary.

## **1.3 TASKS UNDERTAKEN**

The following tasks have been undertaken:

briefing with Council staff;

review of background reports and information;

organising invitations (e.g. Council letters and advertising) to all residents within the general area and community interest groups to participate in two community 'walk and talk' events held at the entry to Waverley Flora Park and at Quarry Road;

assessment of various options for the siting of the Avenue of Honour including the advantages and disadvantages of each option;

consultation with the Department of Defence and Heritage Consultant John Wadsley about the potential options;

drafting of the Landscape Concept Plan for Waverley Flora Park Quarry Road entrance and Avenue of Honour for review and further discussion with Council; and

finalising the recommendations for for Waverley Flora Park Quarry Road entrance and Avenue of Honour.



## SECTION 2

### PRELIMINARY CONCEPT PLANS

#### 2.1 AVENUE OF HONOUR

##### 2.1.1 Introduction

The Heritage Consultant<sup>1</sup> proposed that Council consider:

new street plantings along Quarry Road;

vehicle entry off Quarry Road into a car park;

having the Avenue of Honour located behind the Carawa Street properties; and

construction of themed walking trails for interpretation of the Rifle Range and quarry within the Waverley Flora Park.

The Consultant envisaged that the Avenue of Honour would involve planting 23 trees either planted as a single line or in two lines. It was suggested that the trees could be *Cupressus macrocarpa* (Monterey Pine), similar to what was originally planted. The Consultant's master plan shows a gravel path installed along the avenue with plaques commemorating each soldier placed in front of each tree (similar to the Soldiers Memorial Avenue Walk on the Queens Domain).

Site visits and consultation with the local community (walk and talk) indicated issues with the above proposed siting of the Avenue of Honour.

The main issues were:

the substantial earthworks and costs involved with constructing a new entry road, a vehicle parking area and vehicle barriers to cater for visitors to the Avenue of Honour and Waverley Flora Park given the distance and uneven ground surfaces;

limited potential to be seen and have some presence as a memorial feature; and

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<sup>1</sup> Master Plan for Waverley Flora Park – Former Bellerive Rifle Range and Avenue of Honour 2015

there was limited support expressed by some local residents for the location – the points raised were that this was not an appropriate location given the impact on natural values/qualities of Waverley Flora Park, that it was not the original location of the Avenue of Honour and these memorials should be consolidated elsewhere in the City, the potential impacts given proximity to houses and that the high costs could not be justified.

Consequently, further investigations were undertaken into the potential of locating the proposed Avenue of Honour elsewhere along Quarry Road. This possibility was also discussed with local residents attending the Quarry Road walk and talk. These discussions along with further site visits indicated various options:

along the south western (upper side) of Quarry Road on land forming part of Waverley Flora Park; or

installing street tree plantings that may be fitted into the nature strip of Quarry Road; or

the northern end (lower side) of Quarry Road in proximity to the Department of Defence property.

There are a several constraints with the upper side of Quarry Road. The road there is narrow, just accommodating two way traffic and parking for residents. In addition the road is part of the Metro bus route within Warrane. The constraints effectively reduce the capacity for avenue tree planting along the whole of Quarry Road.

The first option would also require substantial removal of existing native trees to create an Avenue of Honour and this is likely to generate some community concern similar to that expressed previously about protecting the natural values of Waverley Flora Park.

The second option is not considered feasible given the narrow road reserve, the location of underground services, potential implications for the functionality of the road (Metro bus service, parking) and the potential difficulty involved in negotiating approval with multiple adjoining landowners about the placement of the trees.

The third option was investigated but would require Department of Defence approval for acquisition of land to allow for the avenue of tree plantings to be offset from the overhead powerlines.

### 2.1.2 Alternative Avenue of Honour Site Option

Discussions with Council indicated the need to also consider an alternative option for the Avenue of Honour in case the location adjoining the Department of Defence site was not approved by either the Department of Defence or Council.

It was also recognized that the time involved in securing approval may not allow for the works to be designed, tendered and completed ready for the Centennial celebrations on the 7<sup>th</sup> September 2018.

Further investigations associated with the proposed upgrading of the entry to Waverley Flora Park (as outlined in Section 2.2) indicated the potential to align the Avenue of Honour with the existing shared trail from the proposed new car park. The concept option is presented in Figure 2.1 within Section 2.2 of this report.

## 2.2 ENTRY TO WAVERLEY FLORA PARK

Currently there is no on-site parking at the entry to Waverley Flora Park off Quarry Road.

Most of the visitors to Waverley Flora Park are expected to be local residents walking to the site. Other visitors may drive to this location to walk, jog or exercise the dog on the trails. Occasionally walking clubs or other community groups are known to access the Park from this location. Parking of vehicles generally occurs along Quarry Road but this is informal and not designated.

The *Master Plan for Waverley Flora Park – Former Bellerive Rifle Range and Avenue of Honour 2015* indicates the potential to add a nature/adventure based recreation area into the Park. This is to be subject to a detailed design process outside of the scope of this report. However, it is envisaged that a nature/adventure may include provision for:

- new entry off Quarry Road and car parking area;
- a day use shelter with picnic and barbeque facilities;
- public toilets;
- paths leading from the car park to the visitor facilities;
- a range of nature play spaces that will cater for different age groups and activities;

interpretation of the Bellerive Rifle Range;

the Avenue of Honour; and

upgrading and connection to existing trails within the Park

Map 2.1 shows an overall concept plan for the longer term use and development of the entry into Waverley Flora Park subject to available funding for the development of the nature play park. The nature play park has the potential to become a regional play attraction, similar to Simmons Park, Wentworth Park and Bellerive Beach Park.

The proposed car park is along the existing fire trail to minimise the extent of earthworks and levelling required given the slope of the land. It would allow for 35 car parking spaces.

Map 2.2 presents an indicative concept plan for the nature play park, toddlers nature play and visitor facilities near the proposed car park. The plan is indicative of the nature play design elements that could be included in the park but these would need to be determined during detailed design and community consultations. It is proposed that, where possible, the nature play space and facilities have all abilities access.

As indicated previously, the Avenue of Honour could be aligned with the existing trail.

The concept plan is shown in Figure 2.1 and indicates:

upgrading of the shared trail surface from the proposed car park (as shown in Map 2.1);

the undergrounding of the existing powerlines from the entry into the Park for the length of the proposed Avenue of Honour tree plantings;

locating the trees on the southern side of the shared trail with the memorial plaques easily viewed from the trail;

use of native tree species such as White Peppermint Gum (*Eucalyptus pulchella*) or White Gum (*Eucalyptus viminalis*) in preference to introduced species;

spacing of the trees about 6m apart given the canopy spread; and





Above 3 x images - examples of Bushland Adventure Play area



Above 2 x images - examples of family friendly, gravel surface bike trails through native vegetation

# Map 2.1 Waverley Flora Park - Overall Concept Plan for Entry

## Quarry Road, Warrane

JUNE 2017 1:1000 @ A3











Low timber balance beams - items 2 and 16 on plan



Logs for play - items 2 and 16 on plan



Mounded soft fall play feature - item 3 on plan



Exposed aggregate concrete bike path, and timber 'bridges', items 6 and 22 on plan



Pump for water plan, items 5 and 21 on plan



Inground water channel with boulder hop, items 5 and 21 on plan



Climbing feature, with nature play surrounds, item 19 on plan



Natural sand pit- item 20 on plan



Slide with boulder climb - item 18 on plan

# Map 2.2 Waverley Flora Park - Nature Play Concept Plan

\*Where possible all abilities access will be considered in the detailed design of the nature play spaces

JUNE 2017 1:1500 @ A3









**Figure 2.1** **Avenue of Honour Concept**  
Waverley Flora Park

rehabilitation of the open space to maintain the visual presence of the Avenue of Honour plantings whilst maintaining the remnant bushland in the background.

An interpretation panel could be located at the start of the shared trail near the proposed car park.

This would allow the Avenue of Honour to have some visual prominence with the memorial plaques being located close to the walking trail for ease of viewing and reading.

Map 2.3 shows a concept plan for improving the entry to the Park and providing dedicated space for some parking in the short term. It indicates that the current entry road can be widened to provide five car parking spaces. This would require some retaining walls to accommodate the minor cut and fill involved. Any overflow car parking could occur along the eastern side of Quarry Road.

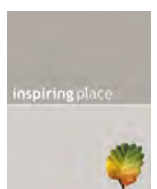
This is considered as a realistic and relatively low cost solution to meet immediate parking needs for visitors at the entry to the Park. It would create a stronger entry into Waverley Flora Park with the parking, relocation of the entry sign and installing of a trackhead sign.



## Map 2.3 Waverley Flora Park - Entry Concept (short term option)

Quarry Road, Warrane

MARCH 2017. 1:200 @ A4





# **SECTION 3**

## **RECOMMENDED ACTIONS**

### **3.1 RECOMMENDED ACTIONS**

1. Council review the draft Landscape Concept Plan for Waverley Flora Park Quarry Road entrance and Avenue of Honour.

#### **INITIATING ACTIONS AND RESPONSIBILITIES:**

Review by Council staff.

Meeting with Heritage Advisory Committee about the Avenue of Honour Concept Plan.

Revision of the Landscape Concept Plan as required.

Prepare initial cost estimates for the proposed works.

2. Proceed to allow implementation of the Avenue of Honour to coincide with the centenary on the 7<sup>th</sup> September 2018.

#### **INITIATING ACTIONS AND RESPONSIBILITIES:**

Seek Council approval to proceed to community review of the Avenue of Honour Concept Plan.

Undertake advertising and community review.

Review the community feedback and undertake any further investigations as may be required.

Undertake a more detailed design of the Avenue of Honour including selection of tree species and sourcing of trees from a nursery.

Review and revise cost estimates.

Lodge a development application (if required) and follow approval processes.

Identify funding for proposed works.

Seek tenders for proposed works.

Commence works.

3. Upgrade the entry and parking arrangements to Waverley Flora Park at the southern end of Quarry Road in the short term.

INITIATING ACTIONS AND RESPONSIBILITIES:

Undertake detailed engineering design for proposed works.

Review cost estimates.

Identify funding for proposed works.

Seek tenders for proposed works.

Commence works.

4. Prepare detailed design plan for the proposed nature play park and visitor facilities in the longer term.

INITIATING ACTIONS AND RESPONSIBILITIES:

Undertake detailed design plan for the nature play park and visitor facilities.

Undertake detailed engineering design for proposed works.

Review cost estimates.

Identify funding for proposed works.

Seek tenders for proposed works.

Commence works.



### 3.2 STAGING OF WORKS

#### 3.2.1 Stage 1 Five Year Plan

	Works	Indicative Costing
1	Implement Avenue of Honour works as per Attachment 1 to allow for upgrading the shared trail, undergrounding of powerlines, advanced trees, plaques, interpretation (total \$96,850) and allowance for preliminaries, earthworks and design contingency.	\$127,842
2	Research and development of interpretation material	\$20,000
3	Formal event for dedication of Avenue of Honour in September 2018	\$5,000
4	Implement short term improvements to the entry into Waverley Flora Park as per Attachment 1	\$58,000
	INDICATIVE COSTS	\$210,842

#### 3.2.2 Stage 2 Ten Year Plan

	Works	Indicative Costing
5	Undertake survey of site features	\$4,000
6	Prepare concept design for the nature play park including cost estimates	\$30,000
7	Assessment by independent playground auditors and provide certifications	\$10,000
8	Prepare detailed engineer design for infrastructure works	Council to do
9	Implement works to extend the entry road, increase car parking and install signage as per Attachment 1	\$245,000
10	Design and construct visitor infrastructure and development elements* including: Toilets \$150,000 Day use shelter \$100,000 Childrens Nature Play Space and Toddlers Nature Play Space \$320,000 Paths \$100,000 Family Bike Area \$50,000	\$720,000
	INDICATIVE COSTS	\$1,009,000

\* These cost estimates for point 10 do not provide estimates for allowance for the Bushland Adventure Play Area or allowance for preliminaries, earthworks and design contingency.



**ATTACHMENT 1**  
**COST ESTIMATES**



# Waverley Flora Park - Entry Carpark (Short Term) Concept Cost Plan 04.04.2017 (-/+25%)

Item	Amount	Unit	Unit \$	Sub-total
Bitumen (base + sub-base + line marking)	185	sq.m.	\$ 150.00	\$27,750.00
Wheel stops (concrete + pinned)	5	item	\$ 250.00	\$ 1,250.00
Low blockwork retaining wall 14m x 1.2 x 290 + 24m x 1.2 x 290	13.272	m3	\$ 450.00	\$ 5,972.40
Garden beds (native shrubs & mulch) (includes preparation, topsoil re-use & treatment as required & mulch)	25	sq.m.	\$ 35.00	\$ 875.00
Kerb and channel	65	l.m.	\$ 90.00	\$ 5,850.00
Culvert and drain pipe (300 diameter)	12	l.m.	\$ 200.00	\$ 2,400.00
Relocate Waverley Flora Park sign	1	item	\$1,500.00	\$ 1,500.00
<b>Total - Above Works</b>				\$45,597.40
plus				
Preliminaries 12%				\$ 5,471.69
Earthworks 5%				\$ 2,279.87
Design contingency 10%				\$ 4,559.74
Sub-total preparation, preliminaries, contingencies				\$12,311.30
<b>Total all works, preparation, preliminaries, contingencies</b>				<b>\$57,908.70</b>

Excludes GST

Excludes major drainage works

Excludes FFE

Excludes Site Infrastructure (stormwater, water, sewer) and demolition 10%

Excludes Design and documentation fees

Excludes Traffic & Pedestrian Management

**Waverley Flora Park - Entry Road and Carpark (Long Term) Concept Cost Plan 04.04.2017 (-/+25%)**

Item	Amount	Unit	Unit \$	Sub-total
<b>Avenue of Honour</b>				
Avenue of Honour to allow for advanced trees (\$14,000), plaques (\$10,350), interpretation panel (\$1500), upgrading shared trail up to trail intersection(200m compacted gravel 3m wide at \$21,000), underground powerlines for 200m (\$50,000) , advanced trees/plaques/interpretation panel ( allow \$28,000)	1	item	\$ 96,850.00	\$ 96,850.00
<b>Entry Road and Carpark (Long term)</b>				
Bitumen (base + sub-base + line marking)	758	sq.m.	\$ 150.00	\$ 113,700.00
Wheel stops (concrete + pinned)	30	item	\$ 250.00	\$ 7,500.00
Retaining wall 70m x 1.5m	105	m3	\$ 450.00	\$ 47,250.00
Garden beds (native shrubs & mulch) (includes preparation, topsoil re-use & treatment as required & mulch)	60	sq.m.	\$ 35.00	\$ 2,100.00
Kerb and channel	70	l.m.	\$ 90.00	\$ 6,300.00
Culvert to capture and divert run-off above car parking areas	70	l.m.	\$ 100.00	\$ 7,000.00
Trailhead sign	1	item	\$ 500.00	\$ 500.00
<b>Total - Entry Road and carpark</b>				\$ 184,350.00
<b>Total - Above Works - Avenue of Honour and Entry Road and carpark</b>				\$ 281,200.00
plus				
Preliminaries 12%				\$ 33,744.00
Earthworks 10%				\$ 28,120.00
Design contingency 10%				\$ 28,120.00
Sub-total preparation, preliminaries, contingencies				\$ 89,984.00
<b>Total all works, preparation, preliminaries, contingencies</b>				<b>\$ 371,184.00</b>

Excludes GST

Excludes major drainage works

Excludes all visitor and nature play park infrastructure including toilets, shelter, paths, play features (nature play park costs to be determined by detailed des

Excludes FFE

Excludes site infrastructure (stormwater, water, sewer) and demolition other than underground power

as listed

Excludes Traffic & Pedestrian Management