

PRINCE OF WALES - NELUNE COMPREHENSIVE CANCER CENTRE AND AUSTRALIAN ADVANCED TREATMENT CENTRE LANDSCAPE DESIGN STATEMENT

1.0 Introduction

This report has been prepared to describe the landscape design for the Nelune Comprehensive Cancer Centre and Australian Advanced Treatment Centre at the Prince of Wales Hospital, Randwick. It provides a summary of the key design considerations and the landscape spatial organisation and key design gestures. Each of the major spaces is then described in turn, followed by the proposed materials and plant species.

2.0 Background

This is an important project as it provides the opportunity to impact on the wider hospital campus and local environment whilst contributing to the well-being of the patients, staff and visitors to the centre.

Of particular importance is the integration of numerous parameters within the landscape design. The landscape needs to suit a contemporary, high-tech medical facility whilst simultaneously providing an appropriate curtilage to the adjacent heritage buildings.

The landscape areas associated with the development of the NCCC & AATC include the curtilage around the existing heritage buildings – the Medical Superintendent's cottage immediately to the east and the Edmund Blacket Building to the south, the street frontages to Avoca Street with its existing heritage fence and to High Street, the forecourt including the vehicular dropoff and main pedestrian entrances to the buildings, the other interfaces between the proposed building and the broader campus landscape, and the sunken gardens.

3.0 Key Spaces

The key spaces that form part of the landscape design of the NCCC & AATC include:

- The heritage cartilage around the Medical Superintendent's cottage to the east and that to the Edmund Blacket Building to the south;
- The Avoca Street frontage to the east, including the existing heritage fence and gates;
- The High Street frontage to the north;
- The forecourt space between the new building and Avoca Street;
- The main axis and pedestrian spine connecting through the centre of the building to the pedestrian entry on Avoca Street to the east and to Building 3 and the rest of the hospital campus to the west, and the secondary link between the main entry and High Street;
- The pedestrian spine and patient / staff spaces between the NCCC & AATC and Edmund Blacket Buildings;
- The entry / garden space at the corner of Avoca and High Streets;
- The sunken gardens located on the east, west and north sides of the NCCC & AATC and in the centre of the forecourt space; and
- The vehicle entry and parking area south of the forecourt.

Each of these spaces is described in more detail from section 5.0 onwards.

4.0 Design Organisation

Our design approach has been to consider the various spaces as all being interconnected, whether horizontally or vertically, whilst each having their own character depending upon their location, context and uses. The interface and integration with both existing and new buildings has also been carefully considered.

The landscape design has an underlying organisational structure consisting of a series of major lines running east-west, expressed in wide edges/walls/seats, bands of planting and the paving pattern, and minor lines running north-south formed by thin concrete walls and kerbs.

The planting design helps to reinforce this structure, with bands of hedge and ground cover planting. Tree planting is used to help define street edges and also within courtyards. The ground plane is intended to have a simple treatment, with a single paving material and areas of lawn providing a simple interface to the buildings, particularly the existing heritage buildings.

5.0 The Heritage Curtilages

The landscape treatment of the heritage curtilages to the Medical Superintendent's Cottage and Edmund Blacket Building is simple and restrained, using a palette of complimentary materials such as stone paving and grass, and simple geometries. The Cottage is surrounded by a simple raised lawn and the three existing trees to the north (a Camphor Laurel, a Monterey Cypress and a Cheese Tree) are proposed to be retained, with new hedge planting and concrete edge against High Street. This lawn will be slightly higher with a wide concrete seating edge to the main pedestrian path and forecourt plaza to the south, and a thinner wall against the pedestrian paths along the east and west sides. A similar treatment of grass will be adopted for the edges to the Edmund Blacket Building.

6.0 The Avoca Street Frontage

The existing heritage fence along the Avoca Street frontage will be retained and the existing gateway will be widened and used as the main pedestrian entry connecting with the pedestrian spine to the main entry of the NCCC & AATC, with one of the stone gate posts relocated and the metal gate removed. New clear stemmed street trees combined with low level planting will help to define this edge and improve the amenity to the street whilst still allowing views through to the heritage buildings.

7.0 The High Street Frontage

The High Street frontage includes the interfaces with the rear of the Medical Superintendent's Cottage and the north facade of the NCCC & AATC. A broad concrete edge of varying height will be used to define this edge, forming a parapet to the lightwell and sunken garden of the NCCC & AATC, a low raised edge to the lawn around the Cottage, and a taller element near the corner with Avoca Street for hospital signage. This will be broken at two points, either side of the Medical Superintendent's Cottage, to provide entry / egress points from the street.

As recommended by the consulting arborist (Arborist Development Assessment Report for Stage 1 & 2 of the NCCC & AATC by Moore Trees), the three existing trees along this frontage behind the Medical Superintendent's Cottage are proposed to be retained. Low hedge planting will be used to further define the street edge of the heritage curtilage to the Cottage.

8.0 Forecourt Plaza Space

The forecourt plaza needs to accommodate pedestrians in various stages of health as well as cars and has the potential to be a calming and welcoming place that can alleviate some of the stresses that will be experienced by users of the space. Most of the forecourt will sit on top of the underground bunkers landscapes and will include a two level sunken courtyard that needs to be seamlessly integrated into the space above.

The forecourt has been designed as a shared space which accommodates both vehicles and pedestrians. The main vehicle circulation and drop-off space is flush with the pedestrian walkway along its western edge to provide a more usable drop-off zone and easy access to the main entry. Vehicles are prevented from running onto this walkway by use of slim steel bollards. Raised concrete kerbs are used to define the north and south edges of the forecourt plaza and, combined with

planting, are also used to keep vehicles and pedestrians away from the edge of the central sunken garden.

9.0 Pedestrian Axes and Connections

The main pedestrian axis runs east-west through the site, passing through the centre of the NCCC & AATC building. To the east, this links the main entry to the centre with the forecourt and then Avoca Street by means of a broad pedestrian walkway. It also continues as a covered link west to Building 3 and the rest of the hospital campus. A secondary east-west pedestrian pathway connects the forecourt with the patient lounges in the south-east part of the centre and the entry to the Edmund Blacket building and Quadrangle.

There are two north-south pedestrian connections to High Street: an accessible pathway to the east side of the Medical Superintendent's Cottage and a walkway with steps to the west which link to the forecourt and main pedestrian spine.

10.0 Garden Spine

The Garden Spine runs between the NCCC & AATC and the Edmund Blacket Building and consists of three main areas: two largely paved public spaces providing a spill-out area to the patient and visitor lounges and pedestrian access to the Edmund Blacket building and Quadrangle; and a more secluded garden space further west for staff use.

11.0 Public Garden

The public garden is situated in the north-east part of the site, east of the Medical Superintendent's Cottage, near the corner of Avoca and High Streets. It will provide a secluded garden space for patients, visitors, staff and the general public to enjoy, as well as an accessible pedestrian walkway between the main pedestrian axis and High Street.

This space will consist of a paved walkway down the west edge with a softer garden area to the east. Public seating will be provided along the walkway. As most of this area is located on top of the bunkers, the garden area will consist of a raised lawn area and low level ground cover planting or hedge planting to the street interfaces. Two trees are proposed in the garden, located beyond the edge of the bunker along the east edge of the garden to help to reinforce the edges of the space and provide shade. This garden will also incorporate the egress stair and air intake/exhaust from the Stage 1 bunkers below.

12.0 Sunken Gardens

There are a number of sunken gardens associated with the NCCC & AATC including:

- An accessible courtyard on the west side of the building north of the main entry at level 0;
- An accessible courtyard on the west side of the building south of the main entry at level 0;
- An inaccessible lightwell on the north side of the building at level 1;
- An inaccessible lightwell at the south-west corner of the building at level 0; and
- A partly accessible courtyard in the centre of the forecourt at level 0.

The two sunken gardens on the west side of the building are intended to provide light and amenity to levels 0 and 1 of the building. These spaces will be looked onto from the radiation oncology unit on level 0, the offices on level 1 and the patient lounges, waiting areas and corridors on level 2. In addition, these courtyards will be able to be accessed by patients from level 0 to use. Both of these gardens will have a permeable canopy of tree ferns providing a foil to the cut rock face behind. They will have hard paved areas for movable furniture interspersed with low level planting with tree ferns providing a light canopy above. Low planting will be provided along the eastern edge against the cut sandstone wall.

The long lightwell along the north side of the building at level 1 will have maintenance access only and will consist of a simple treatment of gravel and low ground cover and vine planting to cover the

adjacent wall in a raised planter. The other lightwell at the south-west corner of the building at level 0 will terminate the corridor from Area 1 and will have bamboo planting in a raised planter to provide vertical elements within gravel paving visible at the end of the Stage 1 corridor at level 1.

The central sunken garden at level 0 is being constructed as part of the Stage 1 works. It will have a glazed corridor and waiting rooms at its east end, and a mix of treatment rooms and offices along its north and south sides, all looking onto the space. The east wall of the garden will consist of a sloping glass facade whilst the west wall of the garden will be a solid feature wall. The accessible area of the garden will be the eastern part adjacent to the corridor and waiting rooms, with more privacy provided to the treatment rooms and offices further west. A series of large, precast paving slabs will provide areas for outdoor seating with the remainder of the garden being a combination of feature gravel bands with informally spaced deciduous trees. The feature wall at the west end of the courtyard will have vines growing on steel cables.

13.0 Parking Court

The parking court is located between the main entry gates and the new forecourt plaza and is intended to have a simple treatment with asphalt paving. The car parking will be set back from the Edmund Blacket heritage building to provide an appropriate frontage treatment. The area between the parking and Avoca Street will be lawn with low hedge planting to the back of the existing heritage fence to partially screen the cars whilst maintaining open views to the building. A footpath will be provided on the west side of the parking court connecting to the new forecourt and NCCC & AATC.

14.0 Materials

Materials used in the landscape design are intended to be simple and robust, and to complement both the existing heritage buildings and the new building. These will include:

- Coloured exposed aggregate insitu concrete paving to the forecourt plaza and major pedestrian spaces and walkways;
- Asphalt paving to the parking court;
- Wide insitu concrete walls and edges as major east-west directional elements;
- Narrow insitu concrete walls and kerbs, steel bollards, and glass balustrades as minor north-south elements;
- Precast concrete, timber and steel seating elements;
- Concrete and gravel paving to sunken gardens;
- Bands of mass planting in the form of low hedges and ground covers; and
- Raised turf lawns.

15.0 Planting

Plant species selections and planting design will be based on a number of criteria including:

- Appropriateness to the locale and site, including existing heritage;
- Suitability for the local climate and specific microclimate of the space;
- Appropriate lifespan, mature size, form, growth habit, foliage density and flowering/fruiting characteristics; and
- Low maintenance requirements.

The planting design will include:

- Tree planting to define the Avoca street edge including the Public Garden;
- Informal feature tree/tree fern planting in Sunken Gardens;
- Linear or banded low hedge and ground cover planting to the street edges, garden spine, public garden and around the central sunken garden opening;
- Informal bands or blocks of ground cover planting and vine planting within sunken gardens; and
- Simple turf lawns to the curtilage of heritage buildings.

APPENDICES

Appendix 1. Indicative Materials Schedule

ITEM	MATERIAL	FINISH
Forecourt Plaza Paving	Coloured insitu concrete	Grit blasted & broom finished
Parking Court & Access Road	Asphalt	
Pedestrian Paving	Coloured insitu concrete	Grit blasted & broom finished
Sunken Garden Paving	Coloured precast concrete Granite river pebbles	Grit blasted Unpolished
Kerbs	Insitu concrete	Extruded
Steps	Insitu concrete	Grit blasted
Walls	Insitu concrete	Grit blasted
Steel Edging	Mild steel	Galvanised
Seats	Precast concrete Mild steel Hardwood timber	Sandblasted Galvanised Clear oil
Bollards	Stainless steel	Grade 316
Handrails	Stainless steel	Grade 316
Balustrades	Glass	Toughened

Appendix 2. Indicative Plant Schedule

Trees

Species	Common Name	Size	Spacing	Mature Height	Mature Spread
<i>Glochidion ferdinandi</i>	Cheese Tree	400L	As shown	8-10m	4-5m
<i>Ulmus parvifolia</i>	Chinese Elm	400L	As shown	6-7m	3-4m

Ferns

Species	Common Name	Size	Spacing	Mature Height	Mature Spread
<i>Blechnum cartilaginum</i>	Gristle Fern	200mm	500mm	500mm	600mm
<i>Cyathea cooperi</i>	Australian Tree Fern	2.0m trunk	As shown	4-6m	2m
<i>Dicksonia antarctica</i>	Soft Tree Fern	1.8m trunk	As shown	4-6m	2m

Shrubs

Species	Common Name	Size	Spacing	Mature Height	Mature Spread
<i>Acmena 'Alyn Magic'</i>	Dwarf Lilly Pilly	200mm	400mm	600mm	500mm
<i>Lavandula allardii</i>	Lavender	200mm	500mm	600mm	600mm
<i>Raphiolepis 'Snow Maiden'</i>	Indian Hawthorn	200mm	400mm	1.0m	1.0m
<i>Rosmarinus officianalis</i>	Rosemary	300mm	500mm	800mm	1.0m
<i>Salvia guarantica 'Costa Rica'</i>	Brazilian Sage	200mm	400mm	1.5m	1.2m
<i>Syzygium 'Tiny Trev'</i>	Dwarf Lilly Pilly	200mm	400mm	800mm	600mm
<i>Viburnum odoritissimum</i>	Sweet Viburnum	300mm	500mm	1200mm	800mm
<i>Westringia fruticosa</i>	Coastal Rosemary	300mm	600mm	1500mm	1.2m

Perennials and Groundcovers

Species	Common Name	Size	Spacing	Mature Height	Mature Spread
<i>Acanthus mollis</i>	Oyster Plant	200mm	400mm	800mm	1.0m
<i>Aspidistra elatior</i>	Cast Iron Plant	200mm	400mm	600mm	450mm
<i>Bambusa lako</i>	Timor Black Bamboo	45L	As shown	8-10m	600mm
<i>Bambusa textilis gracilis</i>	Slender Weavers Bamboo	300mm	As shown	5-6m	300mm
<i>Clivia miniata</i>	Kaffir Lily	200mm	400mm	450mm	300mm
<i>Crinum pendunculatum</i>	Swamp Lily	200mm	400mm	1.2m	1.0m
<i>Dianella 'King Alfred'</i>	Dianella	200mm	400mm	450mm	300mm
<i>Dietes grandiflora</i>	Wild Iris	200mm	400mm	600mm	800mm
<i>Doryanthes excelsa</i>	Gynea Lily	300mm	600mm	1.5m	1.0m
<i>Eriostemon myoporoides</i>	Long Leaf Wax Flower	200mm	500mm	1.0m	1.5m
<i>Liriope 'Evergreen Giant'</i>	Giant Liriope	150mm	300mm	300mm	450mm
<i>Ophiopogon japonicus</i>	Mondo Grass	150mm	300mm	150mm	150mm
<i>Neomarica gracilis</i>	Walking Iris	200mm	400mm	450mm	450mm
<i>Pennisetum alopecuroides</i>	Swamp Foxtail	150mm	300mm	800mm	600mm
<i>Philodendron 'Xanadu'</i>	Xanadu Philodendron	200mm	400mm	600mm	800mm
<i>Phormium 'Bronze Baby'</i>	Dwarf Bronze Flax	300mm	600mm	500mm	600mm
<i>Poa labillardieri Eskdale</i>	Small Tussock Grass	150mm	300mm	600mm	450mm
<i>Spathiphyllum wallisii</i>	Dwarf Peace Lily	150mm	300mm	450mm	600mm
<i>Thymus vulgaris</i>	Common Thyme	150mm	300mm	200mm	300mm

OCULUS	
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Climbers					
Species	Common Name	Size	Spacing	Mature Height	Mature Spread
<i>Cissus antarctica</i>	Kangaroo Vine	200mm	As shown	Varies	Varies
<i>Ficus pumila</i>	Creeping Fig	150mm	As shown	Varies	Varies
<i>Trachelospermum jasminoides</i>	Chinese Star Jasmine	200mm	As shown	Varies	Varies