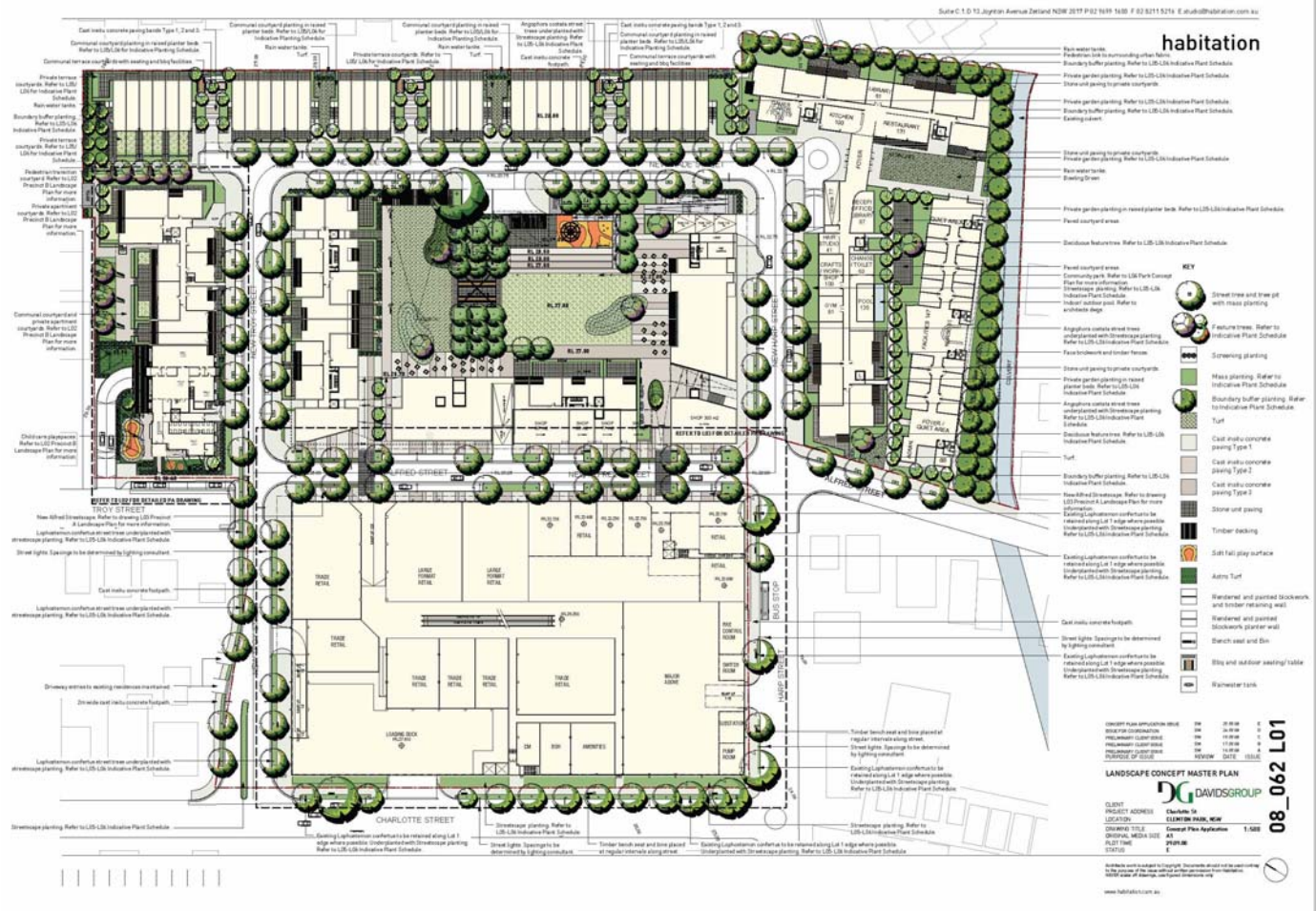


CLEMTON PARK

LANDSCAPE DESIGN REPORT
CAMPSIE NSW
SEPTEMBER 2008



habitation

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1. AUTHORSHIP OF LANDSCAPE INFORMATION

This report and landscape concept has been prepared by David Vago, director of the company Habitation. David Vago is registered with the Australian Institute of Landscape Architects.

This report is to be read in conjunction with the following documents:

- 08_062 L01 Landscape Concept Masterplan
- 08_062 L02 Precinct B Landscape Plan
- 08_062 L03 Precinct A Landscape Plan
- 08_062 L04 Park Concept Plan
- 08_062 L05 Indicative Plant Schedule
- 08_062 L06 Indicative Plant Schedule
- 08_062 L07 Typical Construction Details
- 08_062 L08 Tree Retention Plan
- Arborist Report Prepared by Tree Wise Men Pty Ltd

2. DESIGN PHILOSOPHY AND SYNERGY BETWEEN ARCHITECTURAL AND LANDSCAPE DESIGNS

The landscape design has been developed in consultation with the architects and the client's operational requirements.

In general, various forms of landscape and screening have been implemented around the site boundaries where they form a visual impact to public roads and adjacent residential development. This provides effective screening of the scale of the proposed development and maintains the existing green skyline across the ridgeline of the site.

Pathways and landscaping were designed to facilitate access within the site and to reinforce the safety of pedestrians and vehicular movements on site.

Variety in the landscape has been provided through the use of deciduous and evergreen plants. Trees and shrubs have been selected to provide summer shade, to improve privacy and to screen undesirable views.

The vegetation used in the landscaping is a patchwork of colourful exotic, native indigenous and endemic plantings, which have been designed to reinforce the cultural evolution of the surrounding neighbourhood areas.

The landscape concept seeks to employ a design synergy between architecture and landscape. Feature planting will be positioned to reflect building forms and proposed themes for each precinct. Key entry points are to be highlighted with mature plantings and large canopy trees are used to reduce the scale of the residential units. Various species of street trees have been selected to give a unique character to the different streets and zones across the site, dependent on their function and aspect.

3. DCP 45 LANDSCAPE OBJECTIVES

Residential Development

Landscape treatments should:

- Be an integral part of the design process
- Integrate the development into the streetscape
- Retain existing mature trees within development sites
- Provide screening and filtering to ensure privacy and reduce overlooking
- Provide vegetative links to habitat areas for wildlife movement
- Promote Resident safety
- Be designed for access and mobility

Mixed Use Development

- Ensure site landscaping compliments the streetscape
- Enhance developments through adequate landscaping treatment
- Reduce the visual impact of vehicle parking, manoeuvring areas and large building masses
- Minimize overlooking and provide privacy
- Promote security

New commercial and mixed use development should incorporate landscaping to improve the streetscape and provide privacy to occupants.

This can be achieved by:

- Setting buildings back and creating public plaza areas
- Paving and planting in footpath areas
- Incorporating planter boxes on building levels above ground (eg decks, balconies and podium levels)

Child Care Centres

- To provide external spaces which promote a variety of learning, play and other developmental experiences
- To provide a safe, healthy and attractive environment
- To provide a visual quality to the development
- To screen activities to protect neighbours amenity

4. THE LANDSCAPE CONCEPT

The key main components of the landscape concept are the Communal park and its relationship to the surrounding architecture and the treatment of the streetscapes within the Clemton Park Village.

Communal Park

- The Central Community Park consists of the following features:
 - Covered feature gateway structure highlighting the park entry while creating a meeting point
 - Large open grassed areas for recreation
 - Landscape mounding to provide visual interest, help reduce the scale of surrounding buildings and allow additional soil depth for canopy shade trees.
 - Clumps of trees for shade and to soften the park
 - Long and wide sitting steps to provide additional seating and to form a small amphitheatre
 - Central covered area with long seats and benches for board games and/or lunch
 - Raised playground with disabled access, a variety of active play equipment pieces such as climbing nets. Shade sails are proposed to provide shade.
 - BBQ/picnic area covered by shade sails adjacent to playground to help with supervision and safety.
 - Disabled access to all parts of the park
 - Lighting for security and to highlight key landscape elements such as structures and trees
 - Plaza areas have been created at the park entries to draw the visitor within. These hardscape areas are softened with planting to help in the reduction of the wind tunnel effect. They also form the forecourt to ground floor retail. Unique catenary lighting is proposed over the plaza areas to help define those areas as transition entry zones and feature gateways into the buildings and communal open space.

Streetscapes

- Feature trees will be used to highlight dominant corners and pedestrian crossing zones
- Masses of decorative native grasses will under plant mature trees lining the proposed roads to provide aesthetically pleasing corridors for entering motorists and pedestrians.
- Existing street trees are maintained where possible on Harp and Charlotte streets to maintain the existing character of the site
- Lighting will be included in the landscape to offer safe passage for pedestrians and mark visually important landscape elements
- Planting to the avenues and internal streets will be more colourful and visually appealing
- Feature line marking and change in paving surface will be used to distinguish the pedestrian environment from vehicular traffic on the shared use roads. Pedestrian cross overs will be paved with a different material than footpaths.
- A footpath system provides a valuable pedestrian network around the site. The footpaths link to recreational areas, visitor parking and building entries.
- Concrete footpaths shall be constructed with exposed aggregate and plain concrete banding to provide visual interest.
- Grassed verges have been replaced with planted tree wells to reduce maintenance and provide an attractive soft streetscape.
- Street parking spaces open out onto the footpath to avoid damage to soft landscape areas and to maintain safe egress for visitors and passing pedestrians
- Footpaths have been widened in certain zones to create alfresco outdoor dining to activate the streetscape both during the day and at night.
- Pedestrian crossings are aligned with plaza areas that form gateway transitions into the central communal park.

5. LANDSCAPE GUIDELINES AND COMPLIANCE WITH DCP No 45
“LANDSCAPE” FOR LOTS 1 AND 3

	Use Related Landscape	DA Submission
3.1	<i>Protection of the Environment</i>	<ul style="list-style-type: none"> - Maximize stormwater runoff collection. - 75-100mm thick mulch used to conserve water - Drought tolerant planting - Minimize turf areas - Indigenous planting - deciduous tree have been planted where possible to shade building from summer sun and allow sun through winter months - irrigation system shall be drip and connected to rainwater tanks - Recycled materials shall be incorporated into the landscape as follows: Soil additives(soils made from re-cycled materials and waste) Mulch from chipping of fallen site trees Re-used hardwood timbers Concrete pavements Sub-base preparation for pavers - Existing site topsoil re-used where possible - Minimal soil additives - Gypsum added to clay layer
3.2	<i>Existing Site and Street Trees</i>	<p>Refer to arborist report prepared by Tree Wise Men</p> <p>Culturally significant street trees along Charlotte and Harp street have been retained where possible. All other trees are proposed to be removed as they are considered not significant, do not form part of a “green web” and are in positions that</p>

		<i>have negative impacts on good site planning practices.</i>
3.3	<i>Special Environment Considerations</i>	<i>The site contains no remnant indigenous vegetation or species listed under the Threatened Species Conservation Act 1995</i>
3.4	<i>Community Safety</i>	<ul style="list-style-type: none"> - <i>Where possible vegetation has been used as barriers between public and private space-in particular on ground floor units fronting the park and frontyards fronting the streetscape</i> - <i>Large trees and shrubs are not positioned near dwellings</i> - <i>Clear trunk Tree planting, low shrubs, groundcovers and turf have been utilized in the central open space to maximize visibility and minimize concealment spaces</i> - <i>In general, the design has considered DCP29 Crime Prevention Through Environmental Design.</i>
3.5	<i>Maintenance</i>	<i>- A summary maintenance schedule has been included with the DA submission. A detailed maintenance program shall form part of the operational requirements of the various stages of the project.</i>
3.6	<i>Residential Development</i>	<p><i>PLANTING</i></p> <ul style="list-style-type: none"> -<i>Canopy tree planting has been provided throughout the proposed central park and through the streetscape</i> -<i>The perimeter of ground floor apartments and terraces have been planted with shrubs for privacy</i> -<i>Deciduous trees have been incorporated into courtyards depending on solar orientation to improve solar access and microclimate</i>

		<p><i>-All tree specified are larger than 75Litre in pot size. Trees are planted within garden beds. Tree planting within turf areas is minimized</i></p> <p><i>EDGING</i></p> <p><i>-Steel edging has been used to separate garden beds from turf area</i></p> <p><i>SITE STORMWATER DETENTION</i></p> <p><i>-Drainage swales are incorporated into garden beds and streetscape works</i></p> <p><i>IRRIGATION</i></p> <p><i>-A performance specification summary for irrigation has been included with the submission. This describes the use of an automatic drip system.</i></p> <p><i>-Details of the irrigation system including backflow prevention devices, location of lines etc shall be detailed in the construction documentation stage</i></p> <p><i>UTILITY AREAS</i></p> <p><i>-All garbage storage areas have been located in the basement and are detailed on the architectural documentation</i></p>
3.7	Mixed Use Developments	<p><i>PLANTER BOXES</i></p> <p><i>-Planting depths over slabs on the current scheme are as follows:</i></p> <p><i>400mm depth for turf and groundcovers</i></p> <p><i>-Planter Box walls will be masonry with a minimum wall thickness of 230mm.</i></p> <p><i>-All planting on slab will contain drainage. Refer to raised planter box detail on landscape drawing set and hydraulic consultants drawings</i></p> <p><i>-Waterproofing is shown on the</i></p>

		<p><i>relevant details as mentioned above</i></p> <p>PRIVACY</p> <p><i>-Screening shrubs and trees have been strategically placed to provide privacy to adjoining properties where required and occupants of the proposed development</i></p> <p><i>-All screening shrubs on the boundary are a minimum 2m in height</i></p> <p>SHOW ROOM VISIBILITY</p> <p><i>-There are no show rooms in this development. Cafes that open out to plazas and the street are framed with low planting and clear trunk canopy trees</i></p> <p>UTILITY AREAS</p> <p><i>-Refer architectural documentation. No waste services are located within the landscape at this stage</i></p>
3.9	CHILD CARE CENTRES	<p><i>-boundary fencing is a minimum 1800mm high and is non-climbable</i></p> <p><i>-The child care centre has disability access</i></p> <p><i>-Outdoor recreation areas are separated according to age groups</i></p> <p><i>-Activity zones such as bike tracks and play equipment zones have been delineated</i></p> <p><i>-50% of the external areas is shaded by shade sails</i></p> <p><i>-Storage areas are provided. Refer to architectural documentation</i></p> <p><i>-Garden beds have been located on the landscape plans</i></p> <p><i>-Softfall surface materials have been indicated on the landscape plan</i></p> <p><i>-Refer to architectural documentation for waste storage and handling facilities</i></p> <p><i>-Plant species selection has been taken from the DCP section "suitable plants for child care centres"</i></p>

	Neighbourhood amenity and Character	DA Submission
<i>a</i>	<i>Integration of Design</i>	<i>The landscape design has been produced in conjunction with architectural siteplan and site analysis drawings..</i>
<i>b</i>	<i>Streetscape</i>	<p><i>A majority of the existing trees have been retained where possible to retain the existing site character</i></p> <ul style="list-style-type: none"> <i>- Setbacks have been planted out with vegetation to soften the built edge to the development area</i> <i>- Car parking has been incorporated within the development in the form of visitor spaces. These have been positioned within the landscape islands and street trees.</i> <i>- Screen fences and walls combined with landscape hedges provide the development with privacy</i> <i>- The overall building height and mass form has been softened with avenue street trees and landscape planting. Where possible clumps of trees have been positioned along site perimeter.</i> <i>- Internal streets have been designed with a residential character with trees, footpaths, buffer planting and front boundary planting</i> <i>- The edges of the proposed development site are designed to merge with the surrounding area. Native planting shall define the site edges.</i>
<i>c</i>	<i>Community Safety</i>	<ul style="list-style-type: none"> <i>-The landscape has been designed to allow visual links between residences.</i> <i>- Planting consists of hedges and</i>

		<i>grasses with clear trunk canopy trees</i> <i>- Driveway entrances are clear and pedestrian sight lines maintained</i>
	Site Amenity	
<i>a</i>	<i>Open Space requirements</i>	<i>-The site planning has provided for a large community park and a number of small "plaza like" communal open space areas. These areas include through-site pedestrian linkages (both footpaths and defined pedestrian paths on roads) and pocket parks linked with pathways to service the single residential component of the development. These open space zones include paths,, pergola structures, seating and lighting</i>
<i>b</i>	<i>Equal access</i>	<i>-All pedestrian paths and access ways have been designed to AS1428.1 and are accessible to the elderly and people with disabilities. All ramps are designed at 1:14 with handrails or 1:20. Pedestrian crossings are proposed to be marked and the design has provided for excellent circulation and access across and around all internal streets</i>

6. POST CONSTRUCTION MAINTENANCE AND SITE MANAGEMENT REGIME.

A maintenance program shall be implemented upon completion of construction. An example of a brief maintenance summary has been included on the landscape documentation. Some of the main points in the maintenance program will include:

- The removal/management of leaves from deciduous canopy tree to prevent accumulation of high fuel levels.
- A watering regime tailored to the stages of plant growth and seasonal fluctuations in rainfall and temperature. A permanent irrigation system will be installed for all internal areas connected to the rainwater harvesting tanks. The capacity of these tanks has been designed to never be empty so water will always be available. A temporary system shall be installed for all native and endemic vegetation. Most of this vegetation will be self-sufficient after a 3 year period.
- The proposed development will have full time garden and maintenance staff
- The landscape contractor will be on a 12 month maintenance contract from the date of Practical Completion.
- Mulch levels are to be topped up to a minimum of 75mm.
- Failed plants are to be replaced

7. LANDSCAPE QUALITY ASSURANCE REQUIREMENTS

At the end of the construction period for each Precinct/Lot a landscape architect will be required to certify the completed works. This will form part of the practical completion certificate that will be issued to the client and a copy sent to Canterbury City Council. During the maintenance period the contractor will be asked to submit a report and the health and condition of the landscape works. At the end of the maintenance period a Handover Certificate will be issued to the client and Council.

8. CONCLUSION

The landscape design concept is a fusion of the surrounding suburban Campsie character and modern dense urban development. The landscape provides an interactive and attractive streetscape while preserving the neighbourhood character of the local area. The new central communal open space provides not only the residents of Clemton Park but the local community with a wonderful functional open space asset. This central open space and the streetscape has been designed for a variety of user groups of varying nationalities, ages and disabilities. The landscape concept contains many positive community features such as gathering points, games areas, visitor parking, picnic/BBQ facilities, playground, open space, an area for outdoor events and outdoor dining.

Widths of streets and gateways into the park and development are generous and inviting for the Clemton Park visitor but still intimate enough to help strengthen and develop a local village community atmosphere.

In regards to Lots 1 and 3, the landscape concept has addressed the requirements set out in the Child Care Centres DCP and the objectives of the Residential and Mixed Use Development sections of DCP 45. The streetscape character around Lot 1 has been maintained and strengthened through the retention of street trees and the addition of new trees. Planting around Lot 3 has taken into consideration screening, privacy, security and has been designed to compliment the architecture and address the surrounding laneway and streetscape environments.