

APPENDIX G

Landscape Plans

Prepared by
Site Image

Ettalong Beach
218-220 Memorial Avenue & 47-50 The Esplanade
Ettalong Beach Town Centre

Development Application

January 2010

S I T E I M A G E



Landscape Architects

Proposed Mixed Use Residential Development 218-220 Memorial Avenue & 47-50 The Esplanade Ettalong Beach Town Centre

LANDSCAPE DESIGN STATEMENT

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Prepared for: Tesrol Ettalong Pty Ltd

Project number: SS09-2092

Date: January 2010

Issue: A

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1.0 INTRODUCTION

1.1 Scope

This report describes the landscape design intent of the proposed mixed use residential development located at 218-220 Memorial Avenue and 45-50 The Esplanade, Ettalong Beach Town Centre. This report addresses the landscape elements of the public domain areas of Memorial Avenue, The Esplanade, the Laneway and through site link as well as the proposed private and common space areas located on the upper levels that are associated with this development. The report is to be read in conjunction with related architectural and consultants documents describing the allied aspects of the works.

The landscape proposals are described by the Site Image design documentation, including the following:

- | | | |
|-------|---|-------|
| • 101 | Ground Floor Landscape Plan | Rev B |
| • 102 | Roof Top Landscape Plan | Rev B |
| • 502 | Typical Details, Specification Notes & Schedule | Rev A |

The following documents were also referred to in the preparation of this report:

- Gosford City Council D6.44 Landscape and Vegetation Management Policy,
- Gosford City Council DCP No.159 (Character): Amendment One to Ettalong Beach,
- SEPP (Infrastructure) 2007.

1.2 Landscape Architectural Statement

The landscape character at both ground level and on the upper residential levels enhances the existing site opportunities and takes advantage of the close proximity to the beach and associated foreshore/dune areas.

The landscape design for this site aims to achieve the following goals;

- Improve and up-grade the existing public street-scapes of Memorial Avenue and the Esplanade to incorporate the proposed retail/commercial opportunities,
- Provide a through site pedestrian link that will have a physical and visual connection to the Ettalong Beach foreshore and dune ecosystem,
- Use of landscape finishes & materials that respect the local context & to enhance the visual amenity,
- Use of selected planting material that will withstand the harsh coastal conditions and will enhance and soften the existing urban fabric and compliment the proposed development,
- Implement Environmental Sensitive Design (ESD) principles,
- Adhere to relevant Australian Standards and Government Planning Guidelines.

The aim the development is for the landscape and buildings to complement each other and to operate as an integrated and sustainable system. The proposed landscape design is to provide viable external streetscapes as well as providing visual amenity to this mixed use residential development.

2.0 LANDSCAPE DESIGN

2.1 Existing Site

The existing site is bounded by Memorial Avenue to the west, The Esplanade to the south and the Laneway to the north. The existing site is relatively flat with a slight cross fall towards the beach and there is minimal difference between proposed finish levels and existing levels allowing for equitable access.

There is no existing significant vegetation within the development site and there are three existing palms located adjacent to the Memorial Avenue kerb and five existing palms located adjacent to The Esplanade street frontage. These palms provide very little shade and amenity and they are to be removed and replaced with more suitable street trees as part of this development proposal.

2.2 Ground Floor Landscape Proposals

Memorial Avenue Streetscape Improvements:

The public domain areas of Memorial Avenue are to include new kerb & gutter, parallel parking, new pavement treatments, evergreen street tree planting and shrub, accent and ground cover planting to prominent areas.

Proven species for coastal conditions and for street tree planting will include species such as *Metrosideros excelsa* (NZ Christmas Tree) or *Agonis Flexuosa* (WA Willow Myrtle). These trees are to be equally spaced and within the road paving at approx 7.5m centres to allow for parallel parking between and will provide shade and visual amenity for the street and the proposed development. Tree pits within the road pavement (or rain gardens) allow for stormwater runoff and filtration and will promote Water Sensitive Design (WSUD) initiatives.

New Paving will include exposed aggregate paving using coloured aggregate (to reduce glare) and in context with Ettalong Beach. The expanses of exposed aggregate concrete paving are to be divided by feature colour oxide concrete banding.

At the prominent corner of Memorial Avenue and The Esplanade, shrub and accent planting in rectangular planters has been proposed to segregate casual diners from the traffic and to encourage pedestrian to use existing pedestrian crossings.

The Esplanade Streetscape Improvements:

As with Memorial Avenue the public domain areas of The Esplanade are to include new kerb & gutter, parallel parking, new pavement treatments, evergreen street tree planting and ground cover planting.

The street tree planting will include native coastal species such as *Banksia integrifolia* (Coast Banksia) or *Acacia binervia* (Coast Myall). Along with Memorial Avenue these trees are to be equally spaced and within the road paving at approx 7.5m centres to allow for parallel parking. These evergreen street trees will provide shade and visual amenity for the street as well as the proposed development and the tree pits will also allow for stormwater runoff.

New paving treatment for The Esplanade will be identical the exposed aggregate paving and feature banding that has been proposed for Memorial Avenue.

Through Site Pedestrian Link:

With this development a through site link on the eastern boundary of the site has been proposed so as to establish a physical as well as a visual connection to the Ettalong Beach foreshore. This pedestrian link is approximate 6m in width and allows for public open space including potential alfresco dining areas for the commercial/retail premises.

The basement carpark below this through site link provides an opportunity for raised planters which also become seating walls for the public and with a provision of a set down in the concrete slab at basement level allows for adequate soil depth in each of the raised planters to accommodate evergreen trees.

These boulevard trees will once again be species such as *Angophora costata* (Smooth Barked Apple) or *Eucalyptus botryoides* (Bangalay) which can tolerate harsh coastal conditions and salt spray.

The paving treatment for this through site link will be the same as the exposed aggregate paving and feature banding that has been proposed for Memorial Avenue and The Esplanade so as there is some uniformity to the public domain areas. Decorative stone bollards have been proposed at either ends of the through site link so as to prevent unauthorised vehicle access and spaces between the raised planters allow for potential for future links to neighbouring commercial development.

In general, all the public domain areas are all equitably accessible by both able and non able bodied persons and are to comply with AS1428.1 Access & Mobility.

In particular to this development all paths will maintain good sightlines and passive surveillance and will be adequately lit by external lighting for safety at night and to assist in preventing any occurrences of anti-social behaviour and in accordance with 'Crime Prevention Through Environmental Design' (CPTED) initiatives.

2.3 Roof Top Landscape Proposals

Level 1 Communal Courtyard Area:

A central communal courtyard space allows for a substantial raised planter bed that will become a focal point for the residents of this development. This common area space connects the residents to the lift lobbies, the Gymnasium and the swimming pool areas as well as providing visual amenity to this particular level of the building.

As with the raised planters in the through site link there is an adequate set down in the concrete slab below to allow for substantial planting and the raised planter bed walls also can be used as seating walls.

The central courtyard garden bed consists of predominantly coastal plant species and is based on the concept of a *Meachö* garden. Tree species include the accent and sculptural plantings of *Pandanus pedunculatus* (Screw Pine or Pandanus) and *Cordyline australis* (NZ Cabbage Tree) and also include tree species such as *Allocasuarina littoralis* (Black She-oak) and *Leptospermum laevigatum* (Coastal Tea Tree). Mass plantings of coastal species of shrubs, accent plants, grasses and groundcovers are also proposed for this central garden beds and will be planted amongst of bands of decorative gravels and stone mulches. A path (at slab level) will divide the central garden to not only provide a cross link through the central courtyard space but will also replicate a timber boardwalk.

Exterior wall lighting and up-lights for the trees are proposed for the raised garden beds to provide visual amenity during the hours of darkness.

Levels 2, 4, & 6 Roof Top Gardens:

The design intent for the roof top gardens is to use low water use and low maintenance plant species for all raised planter beds on these levels. As many of these roof top gardens are exposed to harsh winds and salt spray, coastal shrub, accent, grasses and groundcover species have been selected whilst at the same ensuring that these species compliment the building and its coastal environment.

Many of the exterior decks of the apartments over-look the roof levels below so coloured decorative gravels and/or ballast have been proposed as an aesthetic treatment. The different ballasts/gravels will be separated by a steel edge whilst still allowing for efficient drainage of these roof structures.

With outside deck areas on the same level and adjacent to one another, perforated metal Louvre screens have been proposed for the garden beds to provide privacy and to screen these private space areas from each other.

3.0 ESD PRINCIPLES

3.1 Recycled & Sustainable Materials:

The use of recycled and/or sustainable landscape materials are to be used wherever practical in this proposed development. The use of recycled hardwood timbers or new hardwood timbers (sourced from either plantation or regrowth supplies) are to be used for decking and all landscape timber finishes. Hardwood stakes used for trees establishment are to be recycled when no longer required.

The landscape is designed in a manner that respects the use of natural resources, and is efficient in terms of energy for installation and on-going operation.

Recycled products such as plastics and recycled aggregate concrete to be used wherever practical. All landscape materials to be sourced locally wherever possible to reduce transportation and green house emissions.

Imported mulch and soil products are to incorporate recycled and or composted materials where possible.

3.2 Water Use:

All garden bed areas are to be mulched to reduce water transpiration from the soil.

Low-water use plant species have been selected for this development to reduce irrigation requirements and ongoing maintenance.

Irrigation of plants that does occur will be in zones in accordance with separate water requirements. The use of recycled water sourced from on site detention tanks is to be used for irrigation and potable water supply is not to be used for irrigation purposes.

3.3 Use of Native Plant Species:

A conscious effort has been made to use native species for this proposed development where possible. The selected plant species are all coastal low water use plants that consist of 60% native and 40% exotic species.

From this species selection the emphasis will be on the numbers of native individual plantings with the estimated plant numbers being 75% native and 25% exotic species.

The use native species will not only establish quicker, but will have less reliance on irrigation and ongoing maintenance and will also increase the biodiversity of the development site.

4.0 DEEP SOIL PLANTING & PLANTING ON SLAB/STUCTURE

4.1 Deep Soil Planting:

The objectives of deep soil planting are as follows:

- To assist in the management of the water table,
- To assist in the management of water quality, and
- To improve the amenity of the development through the retention and/or planting of large & medium trees.

Deep soil planting occurs within the street tree planting on Memorial Venue and the Esplanade.

4.2 Planting on Slab/Structure:

The objective of planting on slab/structure is to provide adequate soil depths and drainage for planting on slab/structure to thrive.

The typical soil depths for planting on slab/structure for this development are as follows:

- | | |
|--------------------------|-----------------|
| • Large Trees | 1.3m soil depth |
| • Medium Trees | 1.0m soil depth |
| • Small Trees | 0.8m soil depth |
| • Shrubs | 0.5m soil depth |
| • Groundcovers & Grasses | 0.5m soil depth |

LEGEND

	SITE BOUNDARY
	BUILDING LINE
	BUILDING LINE OVER
	CONCRETE KERB
	STREET TREE PIT IN PAVING
	RAISED PLANTER WALL
	PAVING TYPE A - EXPOSED AGGREGATE PAVING
	PAVING TYPE B - COLOUR OXIDE PAVING
	STREET TREE PLANTING REFER DETAIL & SCHEDULE
	BOULEVADE TREE PLANTING REFER DETAIL & SCHEDULE
	SHRUBS < 1.5M HEIGHT REFER DETAIL & SCHEDULE
	ACCENT SHRUBS REFER DETAIL & SCHEDULE
	MASS PLANTED GRASSES & GROUNDCOVERS. REFER DETAIL & SCHEDULE.

Client: TESROL ETTALONG PTY LTD

Project:

MIXED USE RESIDENTIAL
DEVELOPMENT
ETTALONG BEACH

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PART 3A APPROVAL

Drawing Name:

GROUND FLOOR

LANDSCAPE PLAN

Scale: 1:100 @ A1

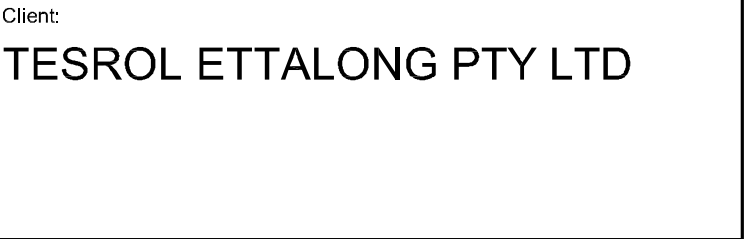
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LEGEND

-  **SITE BOUNDARY**
-  **RAISED PLANTER WALL**
REFER DETAIL.
-  **UNIT PAVERS ON SLAB**
REFER ARCHITECTS DRAWINGS.
-  **DECKING**
REFER ARCHITECTS DRAWINGS.
-  **'HAPPY' STONES.**
REFER SPECIFICATION NOTES.
-  **BALLAST - TYPE A,**
REFER SPECIFICATION NOTES.
-  **BALLAST - TYPE B,**
REFER SPECIFICATION NOTES.
-  **STEEL EDGE.**
REFER DETAIL.
-  **PERFORATED STEEL
PRIVACY SCREEN.**
-  **SMALL FEATURE TREE.**
REFER DETAIL & SCHEDULE.
-  **SMALL FEATURE TREE.**
REFER DETAIL & SCHEDULE.
-  **ACCENT FEATURE TREE.**
REFER DETAIL & SCHEDULE.
-  **SHRUBS < 1.5M HEIGHT.**
REFER DETAIL & SCHEDULE.
-  **ACCENT SHRUBS.**
REFER DETAIL & SCHEDULE.
-  **MASS PLANTED SHRUBS
< 1.0M HEIGHT.** REFER SCHEDULE.
-  **MASS PLANTED GROUNDCOVERS.**
REFER DETAIL & SCHEDULE.
-  **MASS PLANTED GRASSES.**
REFER DETAIL & SCHEDULE.
-  **CLIMBER PLANTING**
REFER DETAIL & SCHEDULE.



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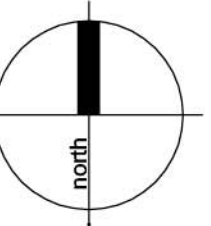
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ROOF TOP
LANDSCAPE PLANS

Job Number:	Drawing Number:	Issue:
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[illegible]

- **SITE BOUNDARY**
REFER DETAIL.
- **RAISED PLANTER WALL.**
REFER DETAIL.
- **UNIT PAVERS ON SLAB.**
REFER ARCHITECTS DRAWINGS.
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- **SHRUBS < 1.5M HEIGHT.**
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- **ACCENT SHRUBS.**
REFER DETAIL & SCHEDULE.
- **MASS PLANTED SHRUBS
< 1.0M HEIGHT.** REFER SCHEDULE.
- **MASS PLANTED GROUND.**
REFER DETAIL & SCHEDULE.
- **MASS PLANTED GRASSES.**
REFER DETAIL & SCHEDULE.
- **CLIMBER PLANTING.**
REFER DETAIL & SCHEDULE.



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SITE IMAGE



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Drawing Name:

ROOF TOP
LANDSCAPE PLANS

Scale: 1:100 @ A1					
Job Number:	Drawing Number:	Issue:			
SS09-2092	102	B			



