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SEABREEZE RESIDENTIAL ESTATE

Stages 15, 16, 17 & 18 Pottsville NSW.

AMENDED STATEMENT OF LANDSCAPE INTENT

PROJECT:

SEABREEZE ESTATE POTTSVILLE BEACH NSW

CLIENT:

NEWLAND DEVELOPERS PTY LTD

USE:

SUPPORTING DOCUMENTATION FOR A DEVELOPMENT APPLICATION

DATE: 13/03/2014

JOB REF: 958.2013

ISSUE: C

















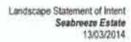




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LANDSCAPE STATEMENT OF INTENT

Lot 1147 on DP1115395 SEABREEZE ESTATE, POTTSVILLE NSW

1 INTRODUCTION

This amended Landscape Statement of Intent has been prepared by BBES on behalf of Newland Developers Pty Ltd in relation to DA13/0577, being an 88 lot subdivision comprising Stages 15 to 18 of Seabreeze Estate. The amended LSOI addresses the issues raised in Tweed Shire Council's Request for Further Information dated 11 December 2013 (Landscape Intent, Page 10) including:

Amendments to reflect the management measures recommended in the Tree Assessment and Management Plan prepared by BBES dated 04/02.2014 (see Section 2.8 Existing Vegetation of the amended LSOI)

As the adjoining open space is used as a sports field, rather than passive open space, passive surveillance from adjacent lots is less important than amenity and privacy considerations. Passive surveillance is available from the extensive frontage of the sports fields to Urunga Drive. Amenity has been improved by planting in front of the boundary fence to maintain privacy for the residents including a ground layer species parallel to the fence line. (see Section 4.0 Landscape Concept & Summery Plan of the amended LSOI)

2 LANDSCAPE SITE ANALYSIS

2.1 Objectives

The landscape site analysis will collect and analyse information from the subject site, relevant planning scheme polices, and the surrounding environment that relate to the design and construction of the landscaping for the proposed development with the objectives of;

- Providing a cost effective and environmentally responsive landscape design in respect of the sites features, constraints and wider urban context.
- · Preservation and enhancement of natural and cultural assets
- · Providing compatible interfaces with the surrounding landscape and land use functions.

This report will guide the landscape planning of the following areas of the proposed development;

- · Create landscape entry statements for the residential estate.
- Providing compatible landscape design to suit the context of the site while providing a modern design.
- Provide screening & buffering for privacy & noise.
- Create open space turf areas for functionality.
- Provide a visually stimulating yet low maintenance landscape.

2.1.1 Site Location

The subject site, Lot 1147 on DP1115395, is located on Seabreeze Boulevard within Seabreeze Estate, Pottsville NSW.



Map 1: Location of the subject site [Source: 2013 Google - Map Data]

2.1.2 Proposed Development



Figure 1: Seabreeze Stage 15, 16, 17 & 18 [Source: 2013 Google Earth - Image]

2.1.3 Planning Policy



The subject site is located within the Tweed Shire local government area. Under the Tweed Local Environmental Plan 2000 (LEP) the site is zoned as 2(a) Low Density Residential. The 2(a) Low Density Residential zone "has been applied to the majority of residential areas. It allows for a range of residential accommodation but is restrictive in terms of other uses which are generally limited to services that meet the day-to-day needs of residents." (Refer to Tweed LEP 2000 zones).

The site also forms part of a Zone 2 (a) Low Density Residential Zone objectives;

Primary objectives

- To enable the ecologically sustainable development of land that is suitable primarily for agricultural or natural resource utilisation purposes and associated development.
- · To protect rural character and amenity.

Secondary objectives

- To enable other types of development that relies on the rural or natural values of the land such as agri- and eco-tourism.
- . To provide for development that is not suitable in or near urban areas.
- To prevent the unnecessary fragmentation or development of land which may be needed for long-term urban expansion.
- To provide non-urban breaks between settlements to give a physical and community identity to each settlement



Map 2: Land Zoning Map - Sheet 27 [Source: Tweed Local Environmental Plan 2000]

This Landscape Statement of Intent has been developed in accordance with the concepts and the conclusions of the associated reports and plans for the proposed Seabreeze development. This includes the provision of maintained grassland in order to comply with fire management issues, requirements for open space, ecological enhancement, recreation and residential amenity.

2.2 EXISTING VEGETATION

The vegetation on the subject site is mapped under the LEP as Highly Modified / Disturbed. A Survey of the subject site and surrounding area indicates that the subject site has been previously cleared and modified and currently contains mixed grassland and an existing Fig tree to be retained.



Photo 1: Maintained grassland on the subject site

Significant landscape features on the land adjacent to the subject site contains riparian vegetation which follows the line of Cudgera Creek to the north and existing wetlands and drainage lines which function as part of the stormwater management system for Seabreeze Estate.

There is an old growth rainforest tree species (*Ficus virens*) that will be conserved in the park area. This tree is currently in a good to fair condition. It will require remedial tree works and weed removal to ensure its long term health and vigour. This tree will provide the residents with a true environmental asset that exhibits ecological and heritage values with and age estimated at over 250 years old.

The site has a backdrop of riparian rainforest which is being enhanced by the ecosystem regeneration practices and landscaping of the site. This riparian vegetation backdrop provides a distinctive landscape character for the proposed development. The landscape intent provides directions for the landscaping of the development which creates its own unique theme while being responsive to the surrounding natural ecosystems and compatible with the surrounding landscape character.

Landscape planting for the site will predominantly utilise native species suited to the area to assist the ecological carrying capacity of the site and surrounding area for native wildlife. A goal of 70% native and 30% exotic will also be attained to ensure landscape character is maintained.

2.3 GEOLOGY

The topsoil of the subject site has been modified with manipulated surface levels and introduction of clean fill. The raised surface levels of the site ensure that landscape construction works will have no impact on the site in relation to acid sulphate soils which are indicated as Class 3 – works below 1m for the subject site.

Landscape planting within the proposed development will require imported organic topsoil in accordance with AS 4419 to provide suitable planting substrate for the allocated landscape species.



2.4 MICROCLIMATE

The subject site is located on low lying land between undulating hills. The surrounding landscape includes residential developments on the surrounding slopes to the south of the site and riparian vegetation of Cudgera Creek and rural land to the North. The mean temperature for the area is calculated at approximately 19.5°C and rainfall to between 1700-1800mm (CSRIO data library, sourced 20.11.2009).

The low lying topography of the subject site and historic removal of surrounding vegetation creates open conditions to solar input. Surrounding undulations and hills will reduce direct early morning and late evening solar input. The low lying location of the site will influence the seasonal temperatures of the site and influence on vegetation and plantings, potentially maintaining heat and cold longer then the surrounding slopes due to reduced airflow.

The influence of prevailing sea breezes is a major factor on the microclimate of the site. The surrounding topography provides a minor reduction to the influence of breezes to the subject site without removing the natural cooling which they can provide.

Drainage on the site will be facilitated by existing drainage easements and manmade wetlands on land adjacent to the development stages. These features may provide additional humidity and cooling functions to the microclimate under certain conditions.

These factors provide a micro-climate on the site suitable for the establishment of a wide variety of landscape plant species.

2.5 ECOLOGICAL FEATURES

The grassland of the subject site is of low ecological value due to the percentage of cleared grassland within the surrounding area which provides the same ecological roles and the disturbed and degraded condition of the soil and vegetation.

The existing wetlands, creek and riparian vegetation on adjacent land provide habitat for a wide range of birds, reptiles, mammals and amphibians. These features will be retained and enhanced by the development proposal. The native street trees and other vegetation proposed for landscaping will provide a supporting habitat role to these existing ecological features.

The drainage swales currently contains a wide variety of weed species, this includes Cenchrus cilaris (Buffel grass) Verbena bonariensis (Purple top) Conyza sumatrensis (Tall fleabane) Cyperus polystachyos (Bunchy sedge) Cyperus rotundus (Nut grass) Gomphocarpus physocarpus (Ballon cotton) Pennisetum clandetinum (Kikuyu grass) Setaria sphacelata (South African pigeon grass) & Typha latifolia (cumbungi).

Landscape Statement of Intent Seabreeze Estate





Existing Drainage Swales: Location of the existing drainage swales

The riparian vegetation community along Cudgera creek is the dominant ecological feature of the Seabreeze estate. The proposal will conserve and enhance this system. The proposed park will retain and conserve the existing fig tree. This area adjoins this ecosystem provides additional native planting and will include weed removal and assisted natural regeneration works to result in long term increase in the sites ecological carrying capacity and reduced landscape maintenance inputs.



2.6 BUILT STRUCTURES

There are no existing buildings or fencing on the subject site. A rock retaining wall exists near the northern boundary. A 1.2 m high pool fence will be constructed along the top of this wall and along the top of the drainage swale to provide consistency and ensure permeable views to the creek system are provided.



2.7 CHANGES IN LEVEL

The natural topsoil contours of the subject site and surrounding land have been previously modified to provide drainage easements and graded development areas. This has influenced the topsoil type and altered overland flow paths; through the introduction of clean fill. A retaining wall in the north of the site provides indication of the changes made to the natural soil levels on the subject site.





Photo 2: Existing drainage easement adjacent to the subject site Photo 3: Existing retaining wall in the North of the subject site



Photo 4: Open Space Park level changes

Photo number 4 demonstrates the change in level in the open space park containing the large *Ficus*. This level change will be utilised to allow a split level area. The upper level will provide a flat area for play equipment, park facilities and kick and play area. The park then has a gentle 1:4 batter slope down onto the lower level. This area will provide a spectacular under canopy nature walk. The top of the batter will include small landscaped mounds to prevent balls from rolling down this slope. (Refer to page 14 *Park Cross Section Concept*)

2.8 EXISTING VEGETATION

This photo illustrates the old growth rainforest species (*Ficus virens*) that will be conserved in the park area. This tree is currently in a good to fair condition. This tree provides the residents with a true environmental asset that exhibits ecological and heritage values with and age estimated at over 250 years old.



Photo 5: Ficus located in the Open Space Park

The vegetation surrounding the tree is dominated by a variety of environmental weed species including Ageratum conyzoides (Billy goats weed) Axonopus compressus (Broad leaved carpet grass (Bidens pilosa (Cobblers pegs) Cinnamomum camphora (Camphor Laurel) Senna pendula (Easter cassia). In accordance with the Tree Assessment and Management Plan (BBES, 04.03.2014), these species will be removed and replaced with native species to increase ecological and aesthetic functions.

The TAMP also reflects the following management measures recommended by a qualified Arborist in order for the continual survival, on going health and vigour of the *Ficus virens* summarised as:

- · Remedial pruning, removal of rubbish and weeds surrounding tree
- Creation of a drainage channel around tree to divert potential water away from the tree roots
- Ensure no impact from facilities, structures or construction works occurs within the Tree Protection Zone (TPZ) or under the existing drip line
- Installation of tree protection fencing immediately after remedial tree works, weed removal, composting and mulching
- All park infrastructures are to be located outside of the 15m TPZ; an
 informal path is indicated on LP08. The path is to contain porous
 material, require no sub grade preparation and kept 10m away from
 the buttress roots. The informal path will strengthen the engagement
 of the community with this environmental asset.

This photo demonstrates the under canopy walk that will be enhanced to provide the residents with a natural feature and an opportunity for the appreciation of the natural environment. The existing weed species will be

removed and replaced with native rainforest plants.



Photo 6: Open Space Park under canopy

LANDSCAPE VISUAL ANALYSIS



To the North of the subject site is Cudgera Creek with an associated vegetation corridor. Beyond Cudgera Creek the land rises into undulating hills used for rural purposes. The views to the North provides a picturesque natural backdrop. These views are to be framed and highlighted by the landscaping of the proposed development.



West of the subject site the existing residential community occurs to the boundary of the site. Beyond the vegetation corridor along the creek. the hills raise into mountain ranges. Landscaping for the proposed development will soften and screen the urban development and frame scenic vistas of the distant ranges.



South of the subject site is dominated by existing residential community. The urban environment occurs across low undulating hills to the south, bounded by Pottsville Road. The landscape design for the proposed development will provide vegetation to visually soften the structural lines of the built forms of both the residential community and the proposed development. Thematic design and species selection for the proposed development will enhance the existing landscape character of the area by providing native trees and shrubs which link the design to the surrounding natural landscape as well as feature foliage plants with strong lines to correspond with the modern resort style of the surrounding landscape chracter and enhance the adjacent wetlands.





East of the subject site incorporates existing residential developments, grassland, undeveloped land, sports fields, wetlands and coastal forest. The landscaping for the proposed development will soften the hard structural lines of the adjacent urban development and frame the natural visual features to the East.



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Seabreeze Estate Stages 15, 16,17 & 18 Potsville NSW.

Visual Analysis Donnes Harrison 13.03.14

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2.10 MATERIAL REUSE

The subject site provides no materials to be re used within the landscape design for the proposed development.

2.11 SURROUNDING LAND USE

The area surrounding the subject site provides for a variety of different land uses including a school, sports facilities, residential housing, parks and gardens, wetlands, a riparian vegetation corridor and rural land. The proposed development is compatible with the adjoining residential land use and will be landscaped to maintain the character of the surrounding area.

Between the proposed development and the change in land use, to rural, is an existing buffer which contains grassland and riparian vegetation. This area provides a suitable visual transition between the differing land uses.

Landscaping of the proposed development will enhance the natural views from the site by softening and screening hard structural lines and framing natural scenic features and vistas.

2.12 NOISE SOURCES

Noise sources to the subject site are low with only occasional construction noise from the developing residential community and traffic corridor along Pottsville Road to the south of the site. Potential noise from agricultural machinery will be minor and seasonal and will not adversely impact on the residents of the proposed development. Existing acoustic fencing and landscape buffers have been established along Pottsville Road.

Landscape Statement of Intent Seabreeze Estate 13/03/2014

2.13 LANDSCAPE CHARACTER OF ADJACENT RESIDENCES





Photo 7 & 8: Landscaped garden of adjacent residence



Photo 9: Landscaped entry statement to adjacent gated residential community

The landscape character of the surrounding residential development consists of a mix of native and exotic plants tolerant of coastal conditions. Feature plants with strong architectural foliage have been consistently used to provide a modern resort character to the area. Xeric species have been frequently utilised providing low maintenance water efficient gardens.

The landscaping for the proposed development will provide native shade trees and shrubs to provide an underlying theme through the development which links to the surrounding natural and rural setting. They will provide vegetation which will soften and frame the surrounding landscape. Plants with striking foliage will provide focal points and features to direct the eye and maintain and enhance the landscape character of the residential estate.



2.14 LANDSCAPE CHARACTER OF THE PARKS & GARDENS



This photo displays the beautiful pocket gardens along the open space path way and landscaped areas that occur in the estate. This landscaping has achieved a unique and natural feel for the residents. This character and appeal will be the direction of this proposal to ensure landscape connectivity between previous stages and these ones.



This photo displays the ease of pedestrian connectivity and the location of paths adjacent to the natural landscape elements. The proposal will ensure continued pedestrian connectivity and provide the residents will an ambient and appealing neighbourhood landscape character.



The Seabreeze Estate has provided different types of recreation facilities for a range of demographic and different user groups. The Intent of this proposal is to ensure that active recreation areas are provided and can be easily accessed by residents and will include playgrounds, bbq's, kick & play areas, shade shelters, bike paths and kids play stations. The landscape planning will have an objective to provide a unique feel for these new stages that will increase the diversity of the open space facilities throughout the entire estate.



This photo displays the future residential views across the existing wetland. The town plan layout will provide lots that back onto the existing drainage lines and wetland systems. These have been maintained by the developer and are currently providing ecosystems that support a broad range of broad species. This provides visual interest and water views for the new residence. The benefits of provided these existing landscape features will be maximised by the landscape design of this proposal.

Landscape Statement of Intent Seabreeze Estate 13/03/2014

3 LANDSCAPE INTENT & DESIGN SUMMARY

The objective of the landscape intent for the proposed development will be to utilise the landscape features of the subject site and scenic surrounds to provide a landscape design which is responsive to the environmental and urban context which it is located.

Native trees and shrubs will be planted along streets, pathways and open space areas to provide shade and amenity to the development. The species selected will provide both a visual and ecological link to the adjacent riparian vegetation along Cudgera creek.

TSC street tree specifications have been acknowledged and noted (refer to section 4 Landscape Concept & Summery Plan of the amended LSOI). In particular, the suitable location of street trees in relation to street lighting and distance from the kerb to the footpath have been noted.

The landscaped entrance features, open space gardens and residential gardens will utilise varieties of native and exotic species featuring striking foliage and architectural form to provide a modern resort theme in character with the landscape gardens of the adjacent residential land use.

The existing adjoining open space is used as a sports field, rather than passive open space. Passive surveillance is available from the extensive frontage of the sports fields to Urunga Drive. Amenity has been improved by proposed planting in front of the boundary fence to maintain privacy for the residents including a ground layer species parallel to the fence line. (see Section 4 Landscape Concept & Summary Plan of the amended LSOI).





Concept of Linear green space along Tom Merchant Drive



Concept of Fencing & Trees to be planted in existing drainage channel.



Concept of Fencing & Trees to be planted adjoining the existing sports oval





Street tree plantings





Exsiting Drianage Channel



Playground Equipment & Shelter



Existing Wetlands



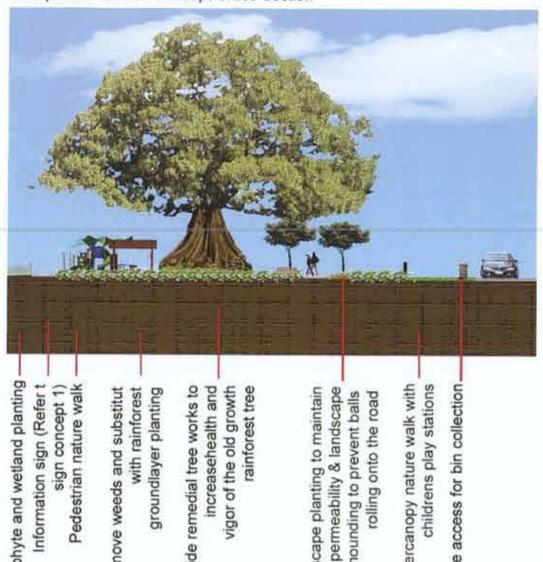
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Master Plan 3D Perspective

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Perspective 1. Park Concept Cross Section



Remove weeds and substitut with rainforest groundlayer planting

Macrophyte and wetland planting

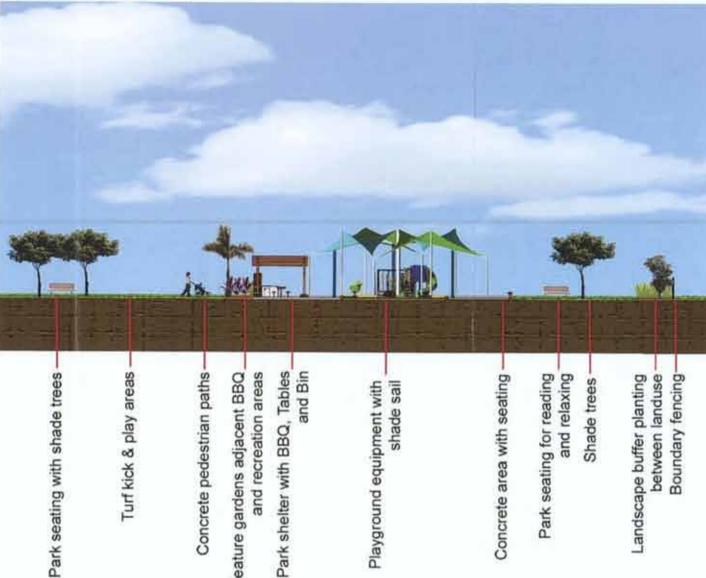
increasehealth and vigor of the old growth rainforest tree Provide remedial tree works to

Landscape planting to maintain visual permeability & landscape mounding to prevent balls rolling onto the road

Undercanopy nature walk with childrens play stations

Adequate access for bin collection

Perspective 2. Park Concept Cross Section

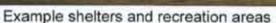


Park shelter with BBQ, Tables and Bin Concrete pedestrian paths Feature gardens adjacent BBQ and recreation areas

Playground equipment with shade sail

Park seating for reading and relaxing Concrete area with seating

Landscape buffer planting between landuse Shade trees







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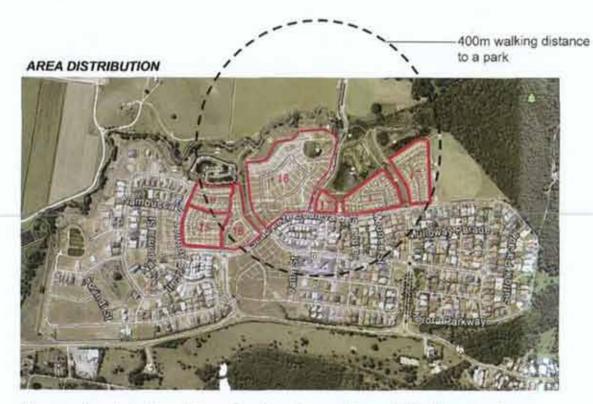
Seabreeze Estate Stages 15, 16, 17 & 18 Potsville NSW.

PARK CROSS SECTION CONCEPT

Dorna Harmon 13.53.2014 N/A 958 2013

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C INFORMATION REQUEST DA13/3577

TWEED SHIRE COUNCIL LOCAL PARKS - DEVELOPMENT STANDARDS



The map above indicates a 400m radius of residences within walkable distance to the proposed park. 95% of the residences will be within 400mm walking distance according to TSC Specification.

CONFIGURATION SHAPE



A central activity zone of 400m2 is achieved to accomodate play areas, equipment and passive use. The plan above indicates a 20m buffer to the residential areas.

AMENITIES









The park incorporates play equipment, soft fall surfaces, under play equipment, kick about area, paving for ball games, seating with shade, landscaping, drinking fountains and general shade. Play areas will be appropriately fenced from the park area to delineate changed use & comply with TSC subdivision standards for parks.

ACCESS





Access for TSC

Vehicular access via the local road (from the cul-de-sac driveway) is available at the park entrance. The turn around access with gate allows TSC to pursue maintenance and to ensure the bicycle and pedestrian networks are kept safe. Adequate access for garbage collection is also achieved by incorporating the maintenance access driveway. >50% Road frontage of the perimeter is not achieved. The cul-de-sac accomodates 50% of the turn around fronting the park.



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Seabreeze Estate Stages 15, 16,17 & 18 Potsville NSW.

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Landscape Statement of Intent Seabreeze Estate 13/03/2014