

To provide for and co-ordinate the subdivision of certain land zoned Residential2(c) in the Milton-Ulladulla area to ensure the following urban form principles:

- *Cohesive access networks;*
- *Appropriate forms of development; and*
- *Conserved scenic and ecological values and opportunities for recreation.*

The subdivision layout alternatives have been designed to be consistent with the principles of ecologically sustainable development. The subdivision layouts will not affect the biodiversity, habitat or ecosystems of the locality and will conserve the scenic and ecological values of the site. They will also provide for a urban form that is consistent with the existing character of the urban areas to the north and east in Dolphin Point and Burrill Lake as well as providing a street network that forms an efficient access system with a clear hierarchy. Passive open space is proposed in Stage 5 and part of stage 3 in this concept plan. This area will contribute to the visual as well as recreational needs of the future occupants of Stages 2 and 3. In our opinion the concept plan is consistent with the above principle aim.

The general urban form requirements and the specific urban form requirements are discussed below:

11.1 General Urban Form Requirements

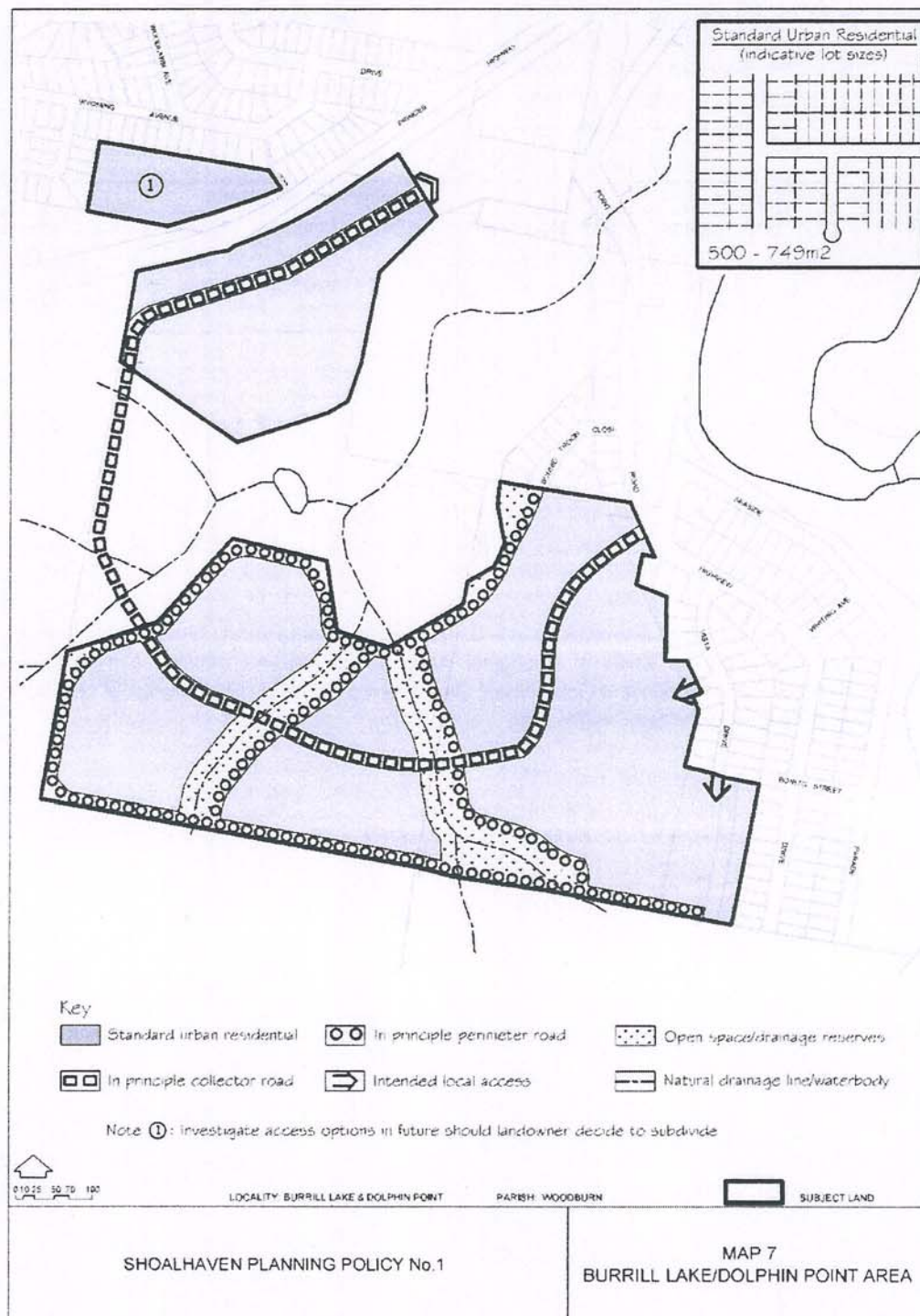
11.1.1 Access Network

The Policy aims to provide a network of streets with a clear and logical hierarchy that where practical, disperses rather than concentrates traffic movements. Map 7 of the Policy identifies the in-principles alignments / location for the road types. Figure 8 is a copy of Map 7 from the Policy. This map includes an in-principle collector road and perimeter road.

The subdivision layout of Stage 1 includes a collector road that is generally in accordance with Map 7 of the Policy. This collector road will be used to access stages 2 and 3.

The collector road will extend to the western extremity of stage 3 and part of stage 2. This road will then extend across the site approximately in the central part of stage 2. The location of this road will allow for the collector road to be extended throughout the adjoining residential 2(c) land to the east of the site and adjoin with Dolphin Point Road when this property is developed.

Figure 8
Map 7 from Shoalhaven Planning Policy No. 1



The location of the collector road on the proposed subdivision layout of stages 2 and 3 is consistent with Map 7 of the Policy. The location of this road will allow for a coordinated access route through the site and to other areas once the adjoining property is redeveloped.

A perimeter road is proposed around the extremities of stage 2 of the development in accordance with Map 7 of the Policy. This perimeter road will allow for easy access for bushfire emergency response and bushfire prone land management as well as ensuring the open space addresses public streets to enable better integration into the subdivision as well as casual surveillance.

The proposal has also incorporated local roads throughout the subdivision.

The access network as identified in stages 1, 2 and 3 is consistent with the access network identified in the Policy.

11.1.2 Form of Residential Subdivision/development

The intent of the Policy is to ensure that residential subdivision/development complies with and makes a positive contribution to the intended future urban structure of the Ulladulla district as well as providing residential development that is sympathetic to existing local character, responds to housing demands and promotes the ideals of ecological and community sustainability.

The alternative subdivision layouts have proposed allotments having a minimum area of 610.4m² to a maximum area of 4445m². The majority of the allotments within the layouts are standard residential lots.

The size and shape of these allotments in the layouts are sympathetic to the local character of Burrill Lake and Dolphin Point as well as responding to the natural constraints of the site. The layouts will ensure ecological sustainability principles are adopted.

At this stage it is not intended to identify particular allotments for medium density development. A proportion (10-20%) of the allotments may be developed for future medium density development subject to market demand. This approach will ensure community sustainability is achieved for the land subdivision.

11.1.3 Public Open Space

Map 7 within the Policy identifies two drainage reserves that are intended as public open space in stage 2. The intent of the Policy is to ensure that open space linkages perform an ecological function, where appropriate, in terms of providing a link between and along areas of ecological significance, such as natural drainage lines.

The Patterson Britton report has confirmed that the drainage lines as indicated on Map 7 do not exist. As all of Stage 2 is devoid of vegetation, it does not provide an ecological link between the wetland area identified in stage 5 and the natural bushland to the south of the site. The site also contains no wildlife corridors. In these circumstances, no ecological function or hydrologic would be achieved by providing the reserves. For this reason, the concept plan has not incorporated the two drainage reserves.

11.1.4 Water Supply and Sewerage

Patterson Britton has developed a water supply and sewerage strategy detailing how the development of stages 2 and 3 will be integrated with the Council's water supply scheme.

11.1.5 Stormwater

The subdivision layouts of stages 2 and 3 have incorporated low impact street drainage design, low impact trunk drainage, infiltration and retention basins. These measures will minimise the stormwater run-off from the new residential development.

11.2 Area Specific Urban Form Requirements

11.2.1 Access Network

The collector and perimeter roads are in accordance with the in-principle alignments on Map 7 of the Policy. This will ensure stages 2 and 3 of the development concept will provide efficient access within and to other areas of Dolphin Point.

11.2.2 Residential Subdivision

The Policy requires that the predominant form of development for the Burrill Lake / Dolphin Point area is 'standard urban residential'. Standard urban residential lots are defined as having an area of between 500m² and less than 749m². The majority of the allotment sizes in the layouts are standard urban residential lots. The subdivision layouts satisfy the requirement that the predominant form of development is standard urban residential.

The Policy also includes scope for the provision of medium density development.

The subdivision layouts have not identified individual lots for future medium density development. All of the allotments would be suitable for medium density development and this form of development is permitted on all Residential 2(c) zoned land.

12.0 COASTAL POLICY

The 1997 Coastal Policy has a strong integrating philosophy based on the principles of ecologically sustainable developments. The development addresses the four principles of ESD in the following way:

Conservation of Biological Diversity and Ecological Integrity

The site has been cleared of most native vegetation. The existing vegetation in the wetland area in stage 5 will be retained and protected by appropriate measures during construction. These measures will ensure that the biodiversity of the wetland area will be retained.

The subdivision layout alternatives will all ensure the siting of future dwellings will make effective use of solar energy and will minimise water usage.

Inter-generational Equity

The project is fulfilling a demand for urban expansion in the Burrill Lake and Dolphin Point area for the benefit of future generations. This will ensure the price of land in the area remains affordable.

Improved Valuation, Pricing and Incentive Mechanisms

The development will be completed in stages. The road and pedestrian network and the passive open space will be constructed by the developer to standards acceptable to Shoalhaven City Council. These will contribute a public asset to the community and will be designed for cost-effective management and maintenance.

The Precautionary Principle

The development will not cause serious environmental damage. The development has been designed to reflect the natural constraints of the site. A contamination survey will be carried out in accordance with the provisions of SEPP 55 and all works necessary to remediate the site will be carried out prior to development.

13.0 OPTIONS

In the preparation of the concept plan, a number of different development options were considered in respect of the subdivision. At this stage options for stage 4 have not been finalised. Stage 4 is affected by clause 20B of SLEP 1985 and a submission requesting variation of this clause is to be lodged with Shoalhaven Council. Until the outcome of this submission is known, it is not possible to prepare planning options for this part of the site.

The various subdivision layout options for stage 2 and 3 have been included in Annexure 4. Options 1 and 3 were not considered the most suitable form of subdivision layout for the following reasons;

- (i) These layouts failed to include the collector road as identified on Map 7 of the Policy. This collector road is important in connecting the Burrill Lake and Dolphin Point urban expansion areas and enabling efficient access within and to other areas.
- (ii) The orientation of the allotments did not encourage the maximum view/outlook for future dwellings.
- (iii) The majority of the allotments would have a non-preferred orientation that would adversely affect the design of future dwellings in terms of energy efficiency and solar access.

The second subdivision layout has been selected as the preferred option for the purposes of the concept plan. This layout is consistent with the current environmental planning instruments and ecological sustainable development principles. The layout will also create an appropriate urban form and character that is consistent with the Burrill Lake / Dolphin Point locality.

The layout for Stage 3 is indicative only.

14.0 KEY ENVIRONMENTAL ASPECTS OF THE PROPOSAL

14.1 Visual Impact

The future development of the site in terms of its visual impact to existing urban development in the area will not be significant given the topography of the site in relation to adjoining urban areas. The development of land already zoned for commercial purposes on the site, although located immediately adjacent to the Princes Highway, will not have a significant impact on existing residences in the township of Burrill Lake as it is located generally opposite the Caravan Park.

14.2 Road Network and Traffic Generation

The development of Stages 2 and 3 will result in a residential subdivision involving around 159 allotments. Vehicular access from these stages will be through the existing subdivision of Stage 1.

Until the development concept for Stage 4 is finalised, it is not possible to consider the traffic implications of this stage.

In terms of traffic generation from Stages 2 and 3, the development will have its greatest impact during the morning and afternoon peak periods. Council's Subdivision Development Control Plan 100 indicates a traffic generation of

10 vehicles per day two-way. This is equivalent to one vehicle per hour during peak hours. The subdivision of Stages 2 and 3 will generate approximately 159 vehicles per hour two way during the morning and afternoon peak periods.

The traffic report prepared by Colston Budd Hunt and Kafes Pty Ltd has assigned the additional traffic to the road network. The findings have been incorporated in this report.

In summary the report has found that the road network will be able to cater for the additional traffic generated by the proposed development. In terms of the intersections, the following findings were made:

- (i) The intersection of Princes Highway with Link Road and Wallaroy Drive would operate with average delays of less than 20 seconds per vehicle during morning and afternoon peak periods. This represents level of service B, a good level of service; and
- (ii) The intersection of Dolphin Point Road with Link Road would continue to operate with average delays of less than 15 seconds per vehicle during morning and afternoon peak hours. This represents level of service A/B, a good level of service.

The existing road network will be able to cater for the additional traffic to be generated by the subdivision as proposed for Stages 2 and 3. The additional traffic will not significantly affect the amenity of the area.

Both Stages 2 and 3 will require an internal road network that will incorporate collector, perimeter and local streets. The design of these streets will be adequate to accommodate the likely traffic volumes. The engineering design of all streets will be in accordance with Council's Engineering Design Specification.

14.3 Public Utilities

All public utilities such as water, sewerage, electricity, telecommunications, street lighting and gas will be provided for the various stages of the concept plan. The provision of these public utilities will be undertaken in accordance with Shoalhaven Council's Engineering Design Specifications. Prior to any work occurring on the site, the appropriate erosion and sediment control measures would be required to be in place.

14.4 Vegetation and Habitat Management

Most of the site is cleared grazing land with some patches of trees and shrubs. The existing trees and shrubs are predominantly located in Stage 5. These trees will be retained to ensure they contribute to an attractive urban environment as well as being the focal points of the open space. The development of Stages 2, 3 and 4 will not result in any loss of any significant vegetation.

Stage 5 contains a wetland environment. To ensure that this area continues to contribute to an attractive urban environment, it will be protected to ensure that stormwater run-off does not adversely impact the wetland. This protection will be by way of a detailed stormwater management strategy that identifies the measures to be implemented to ensure polluted waters do not discharge into the wetland as well as erosion and sedimentation control works that would be implemented during road construction and site works.

The site does not contain any wildlife corridors and is unlikely to have a material impact on any fauna or habitat.

14.5 Bushfire

The bushfire assessment of the site highlighted several constraints that would affect the future development on Stages 2 and 3. These constraints have been incorporated into the subdivision layout for Stages 2 and 3.

An asset protection zone of 30 metres has been incorporated along the western, southern and eastern boundaries adjacent to the adjoining vegetation. This consists of a 20 metre wide perimeter road around the outside of the subdivision and any future dwellings being setback 10 metres from the road frontage. The size and shape of the allotments are adequate to accommodate the required front building line as well as providing an appropriate building envelope for the future dwelling.

The subdivision layout has also incorporated the asset protection zones required to the southeast and west of the dam.

14.6 Subdivision Layout and Pattern

The subdivision layout for Stages 2 and 3 has taken into account the environmental constraints such as bushfire and hydrology as well as opportunities. The gentle sloping nature of the site and its orientation is ideal for the future residential development of the area and ensures that the subdivision layout

will enable the application of energy conservation principles at a future date. As the site has previously been cleared the development results in minimal disturbances to vegetation and habitats.

All of the allotment areas and dimensions are appropriate for the future siting and construction of a dwelling and ancillary outbuildings, the provision of private outdoor space and vehicle parking. The gentle slope of the site ensures earthworks and retaining wall associated with dwelling construction will be minimised.

The subdivision layout is consistent with the residential character of the locality and will contribute to an attractive streetscape and landscape.

The passive open space proposed in Stage 5 will contribute to an attractive urban environment adding to the amenity of the subdivision layouts proposed for Stages 2 and 3. The dam and wetland in this area will be the focal points for the open space.

The subdivision layouts have respected the requirements of the various planning instruments that affect the site.

15.0 STATEMENT OF COMMITMENTS FOR ENVIRONMENTAL MANAGEMENT AND MITIGATION MEASURES FOR THE DEVELOPMENT

The following statement of commitments in managing the project and minimising its impacts on the environment will be implemented as part of the concept plan:

- (i) A preliminary contamination survey will be undertaken and depending on the findings, all works necessary to remediate the site will be carried out prior to any development taking place.
- (ii) The engineering design of all roads will be in accordance with Shoalhaven Council's *Engineering and Design Specification*, Chapter D2 and in accordance with the Australian Model Code for Residential Development (AMCORD) Guidelines.
- (iii) The width of the collector road identified through Stages 2 and 3 will be designed for a minimum pavement width of 9 metres to accommodate future public transport routes.
- (iv) The local street network for Stages 2 and 3 will cater for the provision of public utility networks including water, sewerage, electricity, telecommunications, street lighting and gas. The provision of utility services will be in accordance with

Shoalhaven Council's *Engineering and Design Specification*, Chapters D10 and D11.

- (v) Any land dedicated to the Shoalhaven Council, as public reserve will be provided in a grassed state, free of weeds, for those areas not covered with stands of remnant vegetation. A water service and dedicated vehicular access point by the provision of a concrete crossing together with a locked gate which is able to be opened will also be provided.
- (vi) No significant vegetation will be removed from stage 5 during the construction of Stages 2, 3 and 4.
- (vii) The street component consisting of carriageway widths, verge widths, kerb type, longitudinal gradients and pavement treatments for each local and collector street will be in accordance with Tables 1 and 3 of Shoalhaven Council's Development control Plan No 100.
- (viii) Sewerage reticulation will be in accordance with the Sewerage Development Servicing Plan developed and adopted by Shoalhaven Council.
- (ix) An extension of the existing water supply system is to be provided to all stages of the Concept Plan. A detailed water supply strategy will be required to be prepared for each stage of the Concept Plan.
- (x) Underground electricity supply and telephone service is to be provided to Stages 2, 3 and 4.
- (xi) The design and construction of the major and minor storm drainage systems will be in accordance with Shoalhaven Council's *Engineering and Design Specification*, Chapter D5.
- (xii) The major storm drainage system will provide an overland flow path capable of containing the 1 in 100 year rainfall event and or providing detention storage.
- (xiii) The minor road drainage system will be designed for the 1 in 5 year average recurrence interval.
- (xiv) An erosion and sediment management plan that complies with Shoalhaven Council's *Engineering and Design Specification*, Chapter D7 and Environmental Protection Authority Manual is to be prepared for each stage by a suitably qualified personnel using recognised and locally accepted hydrological, hydraulic hydrogeological, soils, water quality and biological data and design methodologies.

- (xv) The use of the dam for water pollution control will be in accordance with the Department of Housing "Managing Urban Stormwater Soils and Construction Manual".
- (xvi) A landscape plan is to be submitted for Stages 2 and 3 showing:
The street reserve and indicative location of the carriageway;
Location, species and general character of tree planting and
hard and soft landscape treatment.
- (xvii) The perimeter road for stages 2 and 3 will comply with the road construction standards for public roads as identified in the Planning for Bushfire Protection 2001.
- (xviii) Fire hydrants are to be installed in Stages 2 and 3 in accordance with Australian Standard AS2419.1-1994.
- (xix) An asset protection zone of 30 metres will be provided between the adjoining vegetation to the west, south and east and any future dwellings.
- (xx) Future development of Stage 4 will be in accordance with Shoalhaven Council's LEP and DCP requirements.
- (xxi) A Section 90 Consent with Salvage Permit will be sought from the Department of Environment and Conservation. All conditions of this permit will be complied with.