

Attachment A



Development Control Plan No. 126

Badgee Urban Release Area Sussex Inlet

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1 Introduction

1.1 Where this DCP applies

This Development Control Plan (DCP) applies to land within the Badgee Urban Release Area (URA). The land is located approximately 45 km south of Nowra at Sussex Inlet.



Figure 1: Subject Land

1.2 Key objective

To facilitate the development of land in the URA in accordance with the provisions of Clause 541 of Shoalhaven Local Environmental Plan (SLEP) 1985.

1.3 Context /Background

The Badgee URA has been the subject of detailed investigations in relation to the potential for urban development as supported by the Sussex Inlet Settlement Strategy (SISS) and the South Coast Regional Strategy (SCRS). In 2007, Council resolved to rezone the subject land. A Local Environmental Study was completed which formed the basis for a Planning Proposal, which was exhibited in 2012. Council resolved to adopt the Planning Proposal and submit it to the Department of Planning & Infrastructure.

The rezoning was subsequently gazetted in 2013, with two areas of land being deferred from the Plan. The URA has therefore been rezoned to include R1 General Residential, RE2 Private Recreation and E2 Environmental Conservation as shown in Figure 2 below.

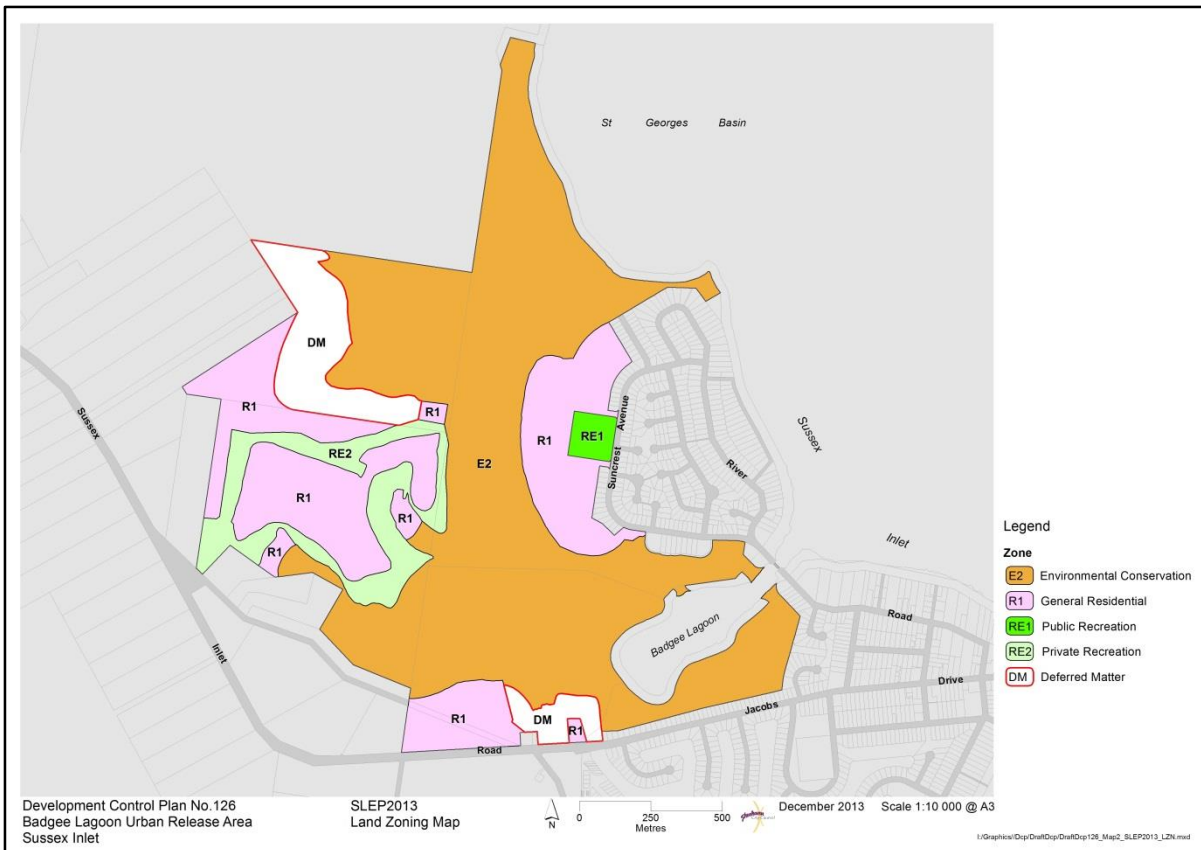


Figure 2: SLEP 1985 Amendment No. 242

1.4 Vision for Badgee URA

The Badgee URA is an extension to the settlement of Sussex Inlet and will strike a balance between urban development of varying densities, conservation and recreation, adjacent to the tidal Badgee Lagoon wetland.

1.5 Relationship to other plans

This DCP should be read in conjunction with Part 6 of Shoalhaven Local Environmental Plan 2013 (SLEP 2013) and other relevant DCPs and policies listed in the relevant sections.

In the event of any inconsistency between the provisions of this DCP and other DCPs which apply to the land, this DCP shall prevail.

In the event of any inconsistency between the provisions of SLEP 2013 and this DCP, the provisions of the Local Environmental Plan (LEP) shall prevail.

1.6 Definitions and abbreviations

All terms are as defined in the Standard Instrument dictionary, where relevant.

2 Submitting an application

2.1 How to Address the Requirements of this Plan

Any application for development in the URA under Part 6 of SLEP 2013 will need to address the provisions contained in this DCP.

In Section 3 of this DCP you may find a combination of Objectives, Mandatory Controls, Performance Criteria and Acceptable Solutions.

Objectives: For each Section or topic of relevance, objectives will clearly state what Council seeks to achieve once the Controls or the Performance Criteria are met.

Mandatory Controls: Are specific, prescriptive measures required for achieving the desired objectives.

Performance Criteria: Identify how a development should perform so that the desired objectives can be achieved.

Acceptable Solutions: Indicate how the development can achieve the desired performance and objectives.

2.2 Information Required with Subdivision Applications

In preparing a development application for subdivision development within the URA, your application must include:

- Plans of the proposed development including:
 - Site Analysis Plan showing relevant attributes of the site in relation to adjoining land, such as topographic features, orientation of lots, character of surrounding development, flooding drainage constraints, opportunities to link to open space/commercial hubs, provision of services, asset protection zones and vegetation corridors.
 - Fully dimensioned plan of subdivision including, where relevant, staging schedule.
 - A tree and vegetation plan showing trees within or adjacent to the Asset Protection Zone (APZ), and showing which trees will be retained and which will be removed or lopped.
 - Preliminary Engineering Plans are required for all subdivision, with particular reference to land or infrastructure to be dedicated to Council.
- A Soil and Water Management Plan.
- Statement of Environmental Effects (SEE) detailing compliance with this DCP and any other relevant DCPs and statutory requirements. The SEE is to include a Variation Statement if any variation to the DCP requirements is sought.

The following MAY be required with a development application:

- A Threatened Species Assessment.
- A Bushfire Risk Assessment Report.
- An Effluent Disposal Assessment.
- A Drainage/Stormwater Assessment.
- A Hydraulic Assessment.
- A Traffic Study

Applications for subdivision is to be consistent with the provisions of DCP 100 Subdivision Code.

2.3 Variations to 'Acceptable Solutions'

The 'acceptable solutions' are provided as examples of what is considered acceptable for the respective performance criteria and objectives. Council can consider alternative solutions in certain circumstances provided the objectives and performance criteria are met.

Justification in the form of a 'Variation Statement' demonstrating how the objectives and relevant performance criteria will be achieved must be provided with the application.

The Variation Statement must address the following matters:

- a) The control being varied;
- b) The extent of the proposed variation and the unique circumstances as to why the variation is being sought;
- c) Demonstrate how the relevant objectives and performance criteria are being met with the proposed variations; and,
- d) Demonstrate that the development will not have any additional adverse impacts a result of the variation.

The Variation Statement must be contained within the SEE that accompanies the development application, and is to be supported by other documentation as necessary. This may include but not be limited to: a detailed site analysis, supporting expert reports, photographs, plans, engineering details etc.

3 Provisions

3.1 Desired Character of Badgee URA

3.1.1 Objective

1. Ensure the desired character of the Badgee URA provides a balance between urban development of varying densities, conservation and recreation.
2. Ensure each of the four Precincts are developed in accordance with the desired character.
3. To adopt building form and scale that creates and enhances the desired character of each Precinct.

3.1.2 Eastern Precinct Desired Character

Relatively low density residential development and extensive open space linkages (including within Asset Protection Zones (APZ's) are appropriate for this precinct and will form a compatible extension to the existing adjoining urban area. The R1 Residential zone provides for a variety of residential development and other small scale urban uses.

A main east-west flood free access road is to be provided commencing from the northern side of the existing Council open space area zoned RE1 Public Recreation and continuing through the Central and Western precincts.

The Council owned open space area zoned RE1 Public Recreation is to be integrated into this precinct to create a safe, useable link to the existing, adjoining urban area. The RE1 zoned land is to be connected to the residential areas by pathways.

The southern boundary of this precinct adjoins the Badgee Lagoon and SEPP 14 Wetland No. 306. The western boundary of this precinct adjoins the central wildlife corridor that under the SCRS are High Conservation Value (HCV) areas. Setbacks and buffers to these sensitive areas are necessary to ensure no edge effect impacts from development of this precinct.

3.1.3 Western Precinct Desired Character

Large parts of this precinct are cleared or disturbed by the existing Sussex Inlet Golf Course. This area provides opportunity for a variety of residential development densities and other associated urban uses that may include recreation, small scale shopping and community uses. This precinct provides the 'hub' which will assist in diversifying housing types, locating any community or commercial uses and increasing social inter-connections.

The area zoned RE2 Private Recreation provides for the existing golf course and any associated structures and/or uses. There are two small degraded waterways within the RE2 zone which are to be rehabilitated and included as part of the open space network. The golf course / open space zoned areas are to be connected by pathways to the 'hub'.

A main central link road will provide the flood free access road commencing in the eastern precinct through to Sussex Inlet Road.

The southern boundary of this precinct adjoins the Badgee Lagoon and SEPP 14 Wetland No. 306. The eastern and northern boundaries of this precinct adjoin the

central wildlife corridor. These are HCV areas, under the SCRS. Setbacks and buffers to these sensitive areas are necessary to ensure no edge effect impacts from development of this precinct.

3.1.4 Southern Precinct Desired Character

Large areas of this isolated precinct are below the 3.1m flood level and are either forested or disturbed by previous quarry or gravel pit use. Relatively low density residential development and extensive open space linkages (including within APZs) are appropriate for the parts of this isolated precinct that are above the 1% AEP (Annual Exceedance Probability).

This precinct is generally bounded by the Badgee Lagoon, SEPP 14 Wetland No. 306 and Jacobs Drive/ Sussex Inlet Road. Setbacks and buffers to the sensitive areas are necessary to ensure no edge effect impacts from development of this precinct.

Road connections are to be formed at two locations along Jacobs Drive/ Sussex Inlet Road along with maintaining a connection to the existing road reserve to the north-west.

3.1.5 Central Precinct Desired Character

This precinct comprises the most significant environmental attributes of the URA, including areas adjoining SEPP 14 Wetlands No. 311 & 306, large areas of endangered ecological communities (EECs) as well as the central wildlife corridor. These are HCV areas, under the SCRS.

As identified in Figure 3, pedestrian pathways are to be constructed along the length of the flood free access road to facilitate pedestrian access between the Eastern and Western Precincts. The pathway on one side of the access road will require a width of 2m to provide for a shared cycleway/footpath in addition to the requirements of the Engineering Design Specifications attached to DCP 100 – Subdivision Code.

A Conservation Management Plan (CMP) is to be prepared by a suitably qualified person for this precinct to guide the use and ongoing management of the precinct into the future. This must be prepared in conjunction with the first stage of subdivision.

3.1.6 Performance criteria and acceptable solutions

Performance Criteria	Acceptable Solutions
<p>P1 Development subject to this DCP will create or contribute to the desired character of each precinct in the URA.</p>	<p>A1 The development application includes a detailed statement and plans indicating how the proposed development creates or contributes to the desired character as outlined in Figure 3 and Sections 3.1.1, 3.1.2, 3.1.3, 3.1.4 and 3.1.5.</p>

Performance Criteria	Acceptable Solutions
<p>P2 A range of lot sizes are provided in the URA, to accommodate a range of dwelling types.</p>	<p>A2 Compliance with DCP 100 – Subdivision Code.</p>
<p>P3 Built form and scale relates to the desired character of the precinct.</p>	<p>A3.1 Residential building heights will generally be limited to one or two storeys in the Eastern and Southern Precinct</p> <p>A3.2 Residential, commercial, recreation and community building heights will generally be limited to one or two storey on the edges of the Western Precinct, and one, two or three storey in the 'hub' of the Western Precinct.</p>

3.2 Subdivision & Staging

3.2.1 Objectives

1. To ensure development opportunities for residential development identified in the adopted Planning Proposal and Part 6 of SLEP 2013 are realised.
2. To ensure the staging of the subdivision allows for timely and efficient release of urban land, specifically in relation to the provision of infrastructure.
3. To ensure the provision of the Flood Free Access Road is in conjunction with the first stage of subdivision.
4. To ensure ongoing protection and maintenance of environmentally significant land.
5. To ensure compliance with all relevant requirements including planning for bushfire protection.

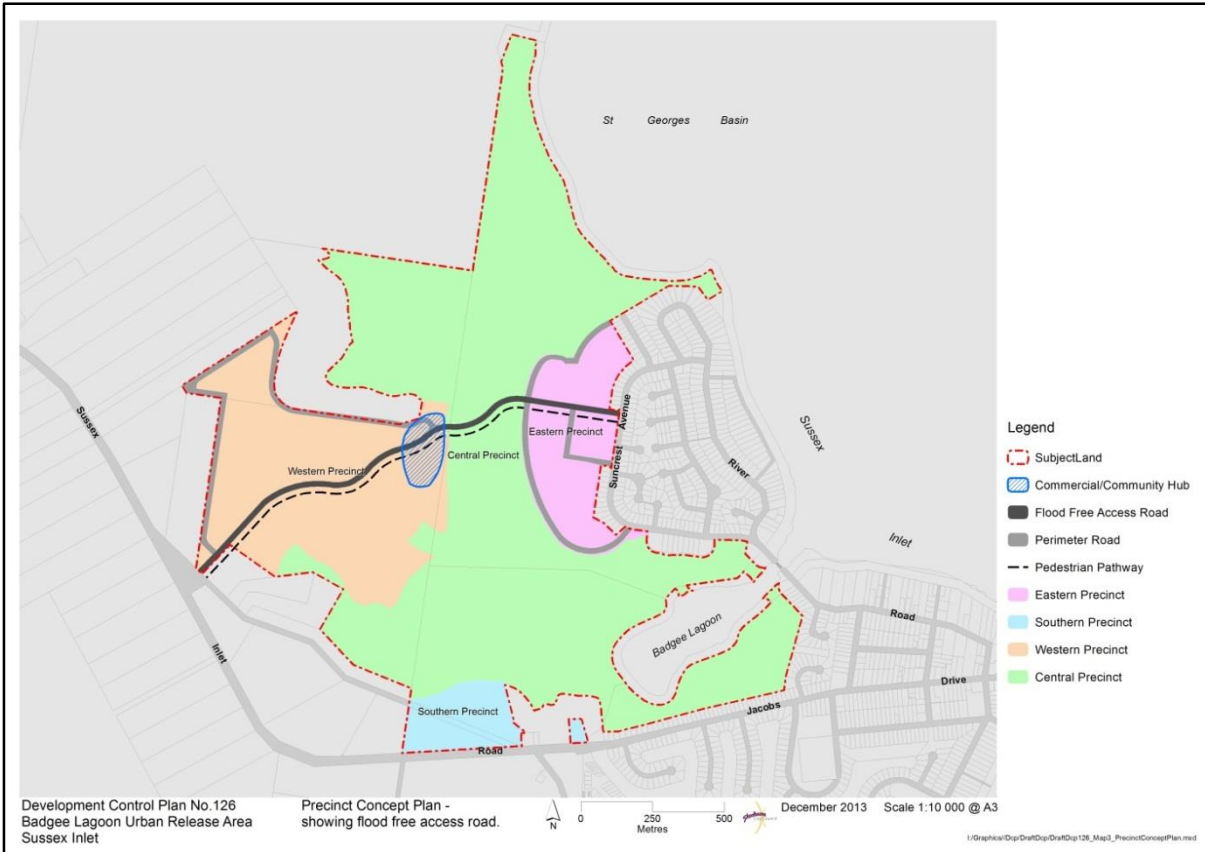


Figure 3: Precinct Concept Plan showing flood free access road

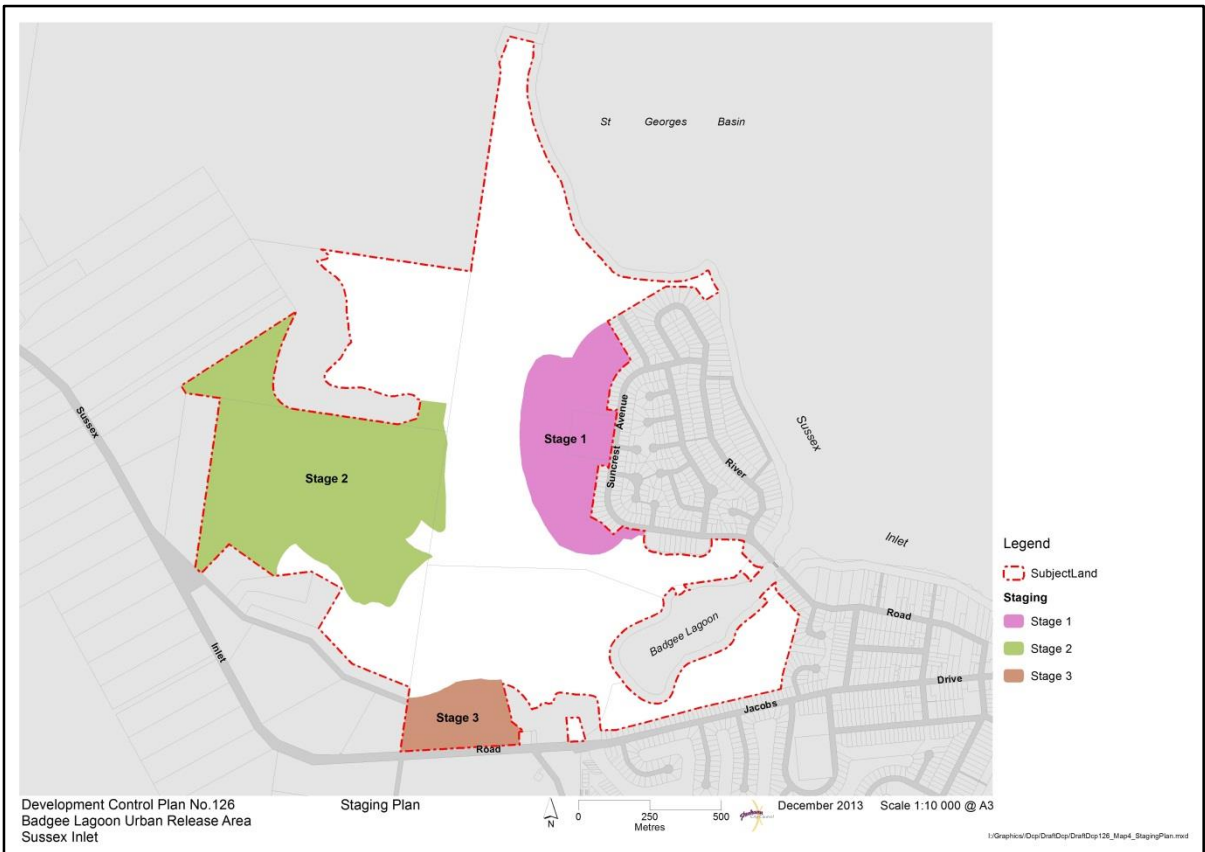


Figure 4: Staging Plan

3.2.2 Mandatory Controls

- C1 All subdivision applications are to include a staging plan, consistent with Figure 4.
- C2 A Conservation Management Plan over the Central Precinct must be prepared in conjunction with the first stage of subdivision.
- C3 Based on Council’s infrastructure availability, initial subdivision stages are to start in the Eastern Precinct followed by the Western Precinct to create the community ‘hub’.
- C4 Should a change in the staging plan be proposed, provision of infrastructure will be at the expense of the developer, including construction of the Flood Free Access Road in its entirety.
- C5 The Flood Free Access Road is to be constructed in its entirety as part of the first stage of subdivision.
- C6 Planning for Bushfire Protection requirements will be satisfied and APZs can/will be maintained in perpetuity.

Specifically the CMP must:
<ol style="list-style-type: none"> 1. Provide adequate and implementable measures and recommendations to ensure the ongoing protection of the environmental and threatened species features known to occur at the site; 2. Provide adequate and implementable measures and recommendations to ensure impacts from activities in the R1 and RE2 zones do not encroach into the Central Precinct; 3. Provide clear schedule of works to ensure that protection measures and recommended works are implemented at appropriate timeframes; and 4. Any monitoring and reporting requirements to ensure that the works are implemented, monitored are reported to Shoalhaven City Council.

3.2.3 Performance criteria and acceptable solutions

Performance Criteria	Acceptable Solutions
<p>P1 Subdivision will enable compliance with Figure 3 and ensure that :</p> <ul style="list-style-type: none"> • The APZ will not conflict with or impact on bushland conservation areas or other restrictions on the subject lot or adjoining lots. • The relevant provisions of DCP 100 – Subdivision Code are satisfied. 	<p>A1.1 The URA will be subdivided as shown in Figure 3.</p> <p>A1.2 Compliance with DCP 100 – Subdivision Code.</p>

3.1 Transport Movement Hierarchy

3.1.1 Objectives

- 1. To achieve a simple and safe movement system, throughout the URA, for private vehicles, public transport, pedestrians and cyclists.

3.1.2 Performance criteria and acceptable solutions

Performance Criteria	Acceptable Solutions
<p>P1 Subdivision includes road networks, traffic management facilities, parking, pathway circulation routes and connections that are safe and appropriate for the scale of development.</p>	<p>A1.1 The transport movement hierarchy is consistent with Figure 3.</p> <p>A1.2 The development application includes roads, pathways, traffic management facilities and parking that support appropriate linkages within and to/from the URA.</p> <p>A1.3 Compliance with DCP 100 – Subdivision Code.</p>

3.2 Biodiversity Conservation

3.2.1 Introduction

Detailed flora and fauna investigations undertaken from 2007 to 2010 identified a range of threatened fauna species such as Glossy-black Cockatoos, Yellow-bellied Gliders, Eastern Pygmy Possums, Owls, and bats. Two threatened orchids (*Pterostylis ventricosa* and *Cryptostylis hunteriana*) were also identified within the URA.

Four of the eight vegetation types identified within the URA are considered to be part of broader EECs, being:

- Coastal Sand Swamp Forest, which is part of the *Swamp Sclerophyll Forest on Coastal Floodplains of the New South Wales North Coast, Sydney Basin and South East Corner Bioregions* and/or *Bangalay Sand forest of the Sydney Basin and South East Corner Bioregions*;
- Estuarine Fringe Forest, which is part of the *Swamp Oak Floodplain Forest of the New South Wales North Coast, Sydney Basin and South East Corner Bioregions*;
- Estuarine Creek-flat Scrub, which is part of the *Swamp Sclerophyll Forest on Coastal Floodplains of the New South Wales North Coast, Sydney Basin and South East Corner Bioregions*; and
- Estuarine Saltmarsh, which is part of the *Coastal Saltmarsh in the New South Wales North Coast, Sydney Basin and South East Corner Bioregions*.

Habitat for most of the threatened fauna and orchids in the URA will largely be retained in the E2 Environmental Conservation zoned lands. The location of this zone has been designed to contain most of the important habitat trees and provide habitat linkages.

3.2.2 Legal requirements for considering the impact of proposed development

The NSW *Threatened Species Conservation Act 1995* (TSC Act) provides for the conservation of threatened species, populations and ecological communities of animals and plants.

Section 5A of the *Environmental Planning and Assessment Act 1979* (The EP&A Act) sets out a ‘seven-part test’ for considering the potential impact of a proposed development on critical habitat, threatened species, populations or endangered ecological communities, and their habitats.

As development of land in the URA will potentially impact on known threatened species habitat, an assessment known as a ‘seven-part test’ will be legally required as part of the development assessment process. A Species Impact Statement (SIS) will need to be prepared if the seven-part test concludes that there will be a significant impact.

3.2.3 Objectives

1. To restore, protect and enhance biodiversity value of the vegetated areas, including any areas which are currently degraded.
2. To encourage the retention of important habitat trees within APZs.
3. To ensure any known sites of the threatened orchid, *Pterostylis ventricosa* and *Cryptostylis hunteriana* are managed to ensure no individuals are harmed or removed without the required assessment and approval.
4. To ensure any residential development is sensitively designed and managed to protect the integrity of surrounding vegetated areas.

3.2.4 Mandatory Controls

- C2 Dog proof fencing will be provided around the R1 zoned land sharing a common boundary with the E2 zone. Barbed wire or electrified fencing is not allowed.
- C3 Noxious and/or environmental weeds will be removed from all land.

Performance criteria and acceptable solutions

Performance Criteria	Acceptable Solutions
P1 Significant impacts on the threatened orchids <i>Pterostylis ventricosa</i> and <i>Cryptostylis hunteriana</i> will be avoided.	All known individuals of the threatened orchids <i>Pterostylis ventricosa</i> and <i>Cryptostylis hunteriana</i> will be retained and protected. Alternatively, a “seven-part test” and if necessary, a Species Impact Statement (SIS) is provided by the applicant.
P2 Trees that will be retained will be protected from potentially damaging activities during construction.	A2.1 Trees and vegetation will be retained and protected in accordance with AS4970 and as such protection measures are indicated at application stage. A2.2 Building material and other items will not be stockpiled within the root zones of any important habitat trees or vegetation that have been retained within the APZ.

3.3 Bushfire Risk Management

3.3.1 Introduction

The URA is identified as Bushfire Prone Land on mapping endorsed by the NSW Rural Fire Service. Application for subdivision in a bush fire prone area is integrated development and requires a Bush fire safety authority under Section 100B of the Rural Fires Act 1997. Application for subdivision must be accompanied by a bush fire risk assessment report.

3.3.2 Objectives

1. To ensure that appropriate asset protection zones (APZs) are provided and maintained to separate development from potential bush fire hazards.
2. To ensure that all bush fire protection measures, including the maintenance of fuel loads in APZs and perimeter fire trails are able to be maintained.
3. To ensure that appropriate vehicular access is provided to cater for fire fighting trucks and other emergency vehicles.
4. To ensure that bushfire mitigation measures are undertaken in a manner consistent with the known environmental constraints.

Mandatory Controls

C1 All Asset Protection Zones (APZs) are located within the R1 and RE2 zones.

3.3.3 Performance criteria and acceptable solutions

Performance Criteria	Acceptable Solutions
<p>P1 Environmental attributes within APZs are appropriately managed.</p>	<p>A1.1 APZs will be established with dimensions specified by Planning for Bushfire Protection.</p> <p>A1.2 Important habitat trees or threatened species within the APZs will be retained and managed in accordance with the RFS's standards for APZ management (available at http://www.rfs.nsw.gov.au).</p> <p>Notes:</p> <ol style="list-style-type: none"> 1. Reduction of fuel does not require removal of all vegetation. 2. Native trees and shrubs should be retained as clumps or islands and should maintain a covering of no more than 20% of the area.

P2 Fire trails, where required, are to be designed, constructed and maintained in a manner that avoids impact on water quality by minimising erosion and appropriately controlling sediment.	A1.3 Compliance with Planning for Bushfire Protection.
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3.4 Flooding

3.4.1 Introduction

Flood studies covering the Badgee area have identified some existing and future development areas to be flood affected and/or isolated in the event of a flood. Specific requirements are therefore identified below in addition to the provisions in DCP 106 Development on Flood Prone Land. In particular, construction of a flood free access road is required to ensure safe and timely evacuation in a flood event.

3.4.2 Objectives

1. To ensure that development does not increase potential flood risks to people, property and the environment.
2. To provide flood free vehicle access between the Eastern and Western Precinct.

3.4.3 Mandatory Controls

- C1 Development complies with relevant provisions in DCP No 106 Development on Flood Prone Land.
- C2 The Flood Free Access Road is to be constructed based on current flood information for the area.

3.5 Site Contamination

Each land owner is responsible for managing contaminated land or contaminating activities. If your land is contaminated or potentially contaminated from a past or current land use, Council recommends that you engage a qualified contaminated land consultant to investigate the levels of contamination and advise you of your obligations. Further details on managing contaminated land are available from the NSW State Government (www.environment.nsw.gov.au).

The process for Council considering potentially contaminated land in the assessment of all subdivision and development applications is outlined in [Council's Contaminated Land Policy](#).

3.6 Stormwater Management

3.6.1 Introduction

An east-west orientated ridge dissects the URA dividing the site into two main catchments, north of the ridge draining directly to St Georges Basin, and south of the ridge draining to

Badgee Lagoon. Groundwater is likely to be at high levels particularly in the lower parts of the URA. The sensitive hydrologic environment requires consideration of stormwater management measures at both a local scale, when individual developments are undertaken, and also at a broader subdivision scale, generally when larger infrastructure works are undertaken.

3.6.2 Objectives

1. Protect and enhance natural watercourses and their associated ecosystems and ecological processes;
2. Maintain, protect and/or rehabilitate modified watercourses and their associated ecosystems and ecological processes towards a natural state;
3. Mitigate the impacts of development on water quality and quantity;
4. Encourage the reuse of stormwater;
5. Integrate water cycle management measures into the landscape and urban design to maximise amenity;
6. Minimise soil erosion and sedimentation resulting from site disturbing activities;
7. Minimise the potential impacts of development and other associated activities on the aesthetic, recreational and ecological values of receiving waters; and
8. Ensure the principles of ecologically sustainable development are applied in consideration of economic, social and environmental values in water cycle management;
9. Stormwater systems and infrastructure are designed, installed and maintained so as to not increase the risk to life or safety of people;
10. To ensure compliance with Water Sensitive Urban Design principles including:
 - protection of the natural hydrological and ecological processes;
 - maintenance of the natural hydrological behaviour of catchments;
 - protection of water quality of surface and ground waters; and,
 - enhancement of visual, social, cultural and ecological values.

3.6.3 Managing stormwater at subdivision scale – Performance criteria and acceptable solutions

Performance Criteria	Acceptable Solutions
<p>P1 The development creates a neutral or beneficial stormwater impact on:</p> <ul style="list-style-type: none"> • The E2 zone from the R1 and RE2 zones and; • The receiving waters of Badgee Lagoon SEPP 14 Wetland and St Georges Basin. 	<p>A1.1 A Stormwater Assessment is prepared showing compliance with Water Sensitive Urban Design principles and levels and forms of On-site Stormwater Detention.</p> <p>A1.2 Compliance with DCP 100 – Subdivision Code.</p>
<p>P2 The land form is stabilised and erosion is controlled during the construction of roads and fire trails.</p>	<p>A1.3 A Soil and Water Management Plan is to be prepared prior to the commencement of construction. The Plan must be designed, installed and maintained in accordance with requirements of Managing Urban Stormwater: Soils & Constructions Volume 1 (Landcom, 2004) Vol 1&2c.</p> <p>A1.4 Permanent drainage works are to be installed as early as practicable in the construction sequence.</p>
<p>P3 Ensure stormwater systems are designed in accordance with industry standards.</p>	<p>A1.5 For mixed residential/commercial, commercial and industrial development, the minor drainage must be designed to cater for a 10 year ARI event.</p>
<p>P4 Runoff from the development is discharged without adverse impacts on existing infrastructure and neighbouring properties.</p>	<p>A1.6 Runoff from impervious areas must not be concentrated or directed onto neighbouring properties.</p>
<p>P5 The development will not increase the risk to life or safety of persons during a storm event.</p>	<p>A1.7 Major drainage flow paths must be designed to ensure a velocity depth product of less than 0.3m²/s for a 100 year ARI storm event.</p>
<p>P6 Major system design shall consider the impact of changes to rainfall intensity due to climate change.</p>	<p>A1.8 Climate change impacts, such as changes to rainfall intensity, are incorporated into system design as per relevant policies and/or Australian Rainfall & Runoff (AR&R) Guidelines.</p> <p>AND</p>

Performance Criteria	Acceptable Solutions
<p>P7 Where relevant, major and minor system design shall consider the impact of sea level rise.</p>	<p>A1.9 Sea level rise is incorporated into system design as per relevant policies and/or AR&R Guidelines.</p>
<p>P8 Reuse of stormwater is optimised to provide an alternative water supply.</p>	<p>A1.10 Stormwater use within public open space (i.e. irrigation, street cleaning, public amenities) is encouraged.</p>
<p>P9 Adequate retention storage is provided.</p>	<p>A1.11 The volume of retention storage provided is to be equal to or greater than: $[\text{storage depth}^*] \times [\text{increase in impervious surfaces compared to pre-development}]$ *Storage depths <ul style="list-style-type: none"> • Single dwelling and dual occupancy = 10mm • Medium density = 9mm </p>
<p>P10 Site discharge will have a minimal impact on receiving waterways and stormwater systems.</p>	<p>A1.12 Small scale development should be designed to achieve a Site Discharge Index (SDI) that does not exceed 0.1</p>
<p>P11 Post subdivision pollutant loads are minimised to not unduly impact on the quality of receiving waterways.</p>	<p>A1.13 Pollutant load reduction shall be a minimum percentage reduction of the post development average annual load of pollutants as per 'best practice' guidelines. AND A1.14 Water quality modelling, preferably using MUSIC, demonstrates reductions in pollutant loads.</p>
<p>P12 Stream stability and habitat are protected by providing retention, infiltration and detention to limit post development flows.</p>	<p>A1.15 For greenfield sites or sites draining to a natural stream of 3rd order or lower, the 1.5 year ARI pre-development peak discharge must be maintained. AND A1.16 For development discharging to a natural stream of 3rd order or lower that is not tidal, the post development duration of stream forming flows shall be no greater than 2 times the pre-development duration of stream forming flows at the site discharge point, i.e. a stream erosion index of 2.</p>

Performance Criteria	Acceptable Solutions
	A1.17 For development discharging to a tidal area, outlets must be designed to limit erosion and sedimentation at the discharge point.

3.6.4 Onsite Stormwater Detention (OSD) Controls

Stormwater detention measures temporarily detain stormwater onsite in order to prevent flooding and erosion further downstream. The following section sets out performance criteria for onsite stormwater detention and applies to all developments and subdivisions **except:**

- a) Where overall site impervious areas are less than 50% of the site; or
- b) in areas within the 5 year ARI flood extents as identified in a Flood Study or Floodplain Risk Management Study adopted by Council; or
- c) for new developments in subdivisions where OSD has already been provided for the entire subdivision.

Performance Criteria	Acceptable Solutions / Reference
P1 Post development peak flow should match as closely as possible pre-development peak flow.	A1.1 OSD is to be sized to match pre-development peak flow rates for the 5, 20, and 100 year ARI rain events for that site.
P2 OSD measures are made safe.	AND
P3 The development does not place an unacceptable financial burden on landowners or the community.	A1.2 For development other than subdivision, pre and post-development peak flow calculations shall be based on the impervious percentages (as outlined below) or the actual impervious surface area (whichever is greater) as detailed on development plans.
P4 OSD is designed in accordance with industry and/or Council standards.	AND A1.3 For subdivisions, pre and post-development peak flow calculations shall be based on the impervious percentages as outlined below. Area impervious: <ul style="list-style-type: none"> • Open Space – 25% • Normal residential – 60% • Half width road reserve – 95%

	<ul style="list-style-type: none">• Medium density residential lots – 80%• Commercial areas – 90%
	AND
A1.4	OSD design shall consider downstream boundary conditions for the 100 year ARI level of the receiving water.
	AND
A1.5	Detention storage must be located at a level above the 5 year ARI flood level.
	AND
A1.6	If OSD is provided in landscaped areas, the desirable maximum depth of ponding under design condition is 300mm, this can be increased to 1200mm provided that site slopes of the basin are $\geq 1:6$, or the provided storage is fenced off.
	AND
A1.7	For subdivisions it is recommended that OSD is at the individual dwelling scale. Where OSD is proposed on public land, the OSD system must be kept to a minimum.
	AND
A1.8	50% of any retention volume can contribute towards the OSD volume required for the development, provided the systems are interconnected.*

* The definition of retention volume is the storage volume available for reuse (e.g. rainwater tanks) and/or the volume of storage provided in systems that allow infiltration into the soil profile, e.g. bioretention trenches.

Retention should not be confused with *detention* which does not reduce runoff volume. However, retention volume can contribute towards your detention (OSD) requirements provided the systems are interconnected. In this case 50% of the retention volume can be credited to the OSD volume.

3.6.5 Design and maintenance of stormwater treatment measures

The following section sets out design and maintenance controls that apply to all large scale developments that require stormwater treatment measures.

Performance Criteria	Acceptable Solutions / Reference
<p>P5 All stormwater treatment measures must be able to be maintained appropriately to ensure their optimal efficiency.</p>	<p>A1.1 Where practicable, trunk drainage is to be provided as a natural vegetated stable channel.</p> <p>AND</p>
<p>P6 Protect permanent stormwater treatment against siltation/sedimentation and clogging during construction.</p>	<p>A1.2 An Operation and Maintenance Plan is submitted to Council for all stormwater treatment measures proposed, whether they remain in private ownership or to be handed over to Council.</p>
<p>P7 Stormwater treatment measures do not unduly increase health and safety risks.</p>	<p>AND</p> <p>A1.3 System design allows for maintenance (i.e. access and room to operate safely) at all times.</p>
<p>P8 The development will not unduly increase maintenance requirements of stormwater infrastructure by Council.</p>	<p>AND</p> <p>A1.4 Stormwater treatment measures must not be connected until the majority of catchment infrastructure is completed and landforms stabilised. Whole of life cycle costs are to be taken into consideration.</p>
<p>P9 Stormwater treatment devices are designed in accordance with best industry practices.</p>	<p>AND</p> <p>A1.5 Where the development is staged, sacrificial zones must be included in the design of the stormwater treatment measures. Sacrificial zones are to be rectified upon completion of development at the developers cost.</p> <p>AND</p> <p>A1.6 Structural stormwater treatment measures must be able to bypass flows in excess of the design discharge with negligible afflux resulting from overtopping or blockage of the device.</p> <p>AND</p>

	<p>A1.7 In the event of a stormwater discharge, structural stormwater treatment measures must not allow the release of any previously trapped material and must be designed to prevent or manage any additional surcharge from any inlet or pit.</p> <p>AND</p> <p>A1.8 Stormwater treatment measures must consider mosquito control in their design.</p> <p>A1.9 Designs should consider:</p> <ul style="list-style-type: none">• Permanent water ponding,• Water depth,• Exposure to sunlight and wind,• Proximity to residential development <p>Refer to expert advice where necessary.</p> <p>AND</p> <p>A1.10 Development must provide for stormwater treatment measures to be contained on the lot unless otherwise agreed to by Council, prior to development approval being granted.</p> <p>AND</p> <p>A1.11 All filter media used in stormwater treatment measures must meet the current specifications of the Guidelines for filter media in biofiltration systems (Version 3.01) (Facility for Advancing Water Filtration, 2009) or a demonstrated equivalent, verified by a soil laboratory registered by the National Association of Testing Authorities.</p>
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3.7 Landscaping Strategy

3.7.1 Objectives

1. To protect and maintain riparian areas and remnant vegetation.
2. To promote biodiversity through careful native plant selection.
3. To enhance both the public and private domain within the URA, especially visually prominent public open space areas.
4. To contribute to the overall water sensitive urban design approach within the URA.

3.7.2 Performance criteria and acceptable solutions

Performance Criteria	Acceptable Solutions
<p>P1 Any subdivision includes a detailed landscape strategy that complements and is characterised by the native vegetation and softens the built form.</p>	<p>A1.1 The landscape strategy for the subdivision is prepared by a suitably qualified person and includes, as a minimum:</p> <ul style="list-style-type: none"> • extensive landscaping and street tree planting based around local native species; • protection of riparian areas • landmark tree planting in entry locations and the community ‘hub’; • continuity and consistency in the streetscape and street furniture; • some deep soil planting to enable a substantial tree cover to be created over time; and • removal of noxious species <p>A1.2 Compliance with DCP 100 – Subdivision Code.</p>

4 Other legislation or policies you may need to check

Other legislation that may have implications for your proposal includes:

Title	Issue	Link to Legislation
NSW Legislation		
Environmental Planning and Assessment Act 1979	General environmental planning requirements	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+203+1979+cd+0+N
National Parks and Wildlife Act 1974	Aboriginal cultural heritage	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+80+1974+cd+0+N
Native Vegetation Act 2003	Protection of native vegetation	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+103+2003+cd+0+N
Rural Fires Act 1997	Bushfire protection and mitigation	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+65+1997+cd+0+N
State Emergency and Rescue Management Act 1989	Definition of emergency in relation to vegetation clearing	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+164+1989+cd+0+N
Threatened Species Conservation Act 1995	Protection of biological diversity and threatened species preservation	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+101+1995+cd+0+N
Water Management Act 2003	Protection and management of water and water quality	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+92+2000+cd+0+N
State Environmental Planning Policies		
State Environmental Planning Policy No 14—Coastal Wetlands	Preservation and protection of coastal wetlands - water quality	http://www.legislation.nsw.gov.au/maintop/view/inforce/epi+532+1985+cd+0+N
Jervis Bay Regional Environmental Plan 1996	Protection of the natural and cultural values of Jervis Bay	http://www.legislation.nsw.gov.au/maintop/view/inforce/epi+13+1997+cd+0+N
Local Environmental Plans		
Part 6 Shoalhaven Local Environmental Plan 2013.	LEP requirements associated with the URA.	To be inserted
Development Control Plans		
Development Control Plan No. 100 – Subdivision Code – Amendment No. 4	To provide controls for subdivision development	http://doc.shoalhaven.nsw.gov.au/displaydoc.aspx?record=POL12/316

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Development Control Plan No. 106 – Amendment No. 1	Provide information and development controls needed to prepare and assess development applications on flood prone land.	http://doc.shoalhaven.nsw.gov.au/displaydoc.aspx?record=POL11/112
Other Policies		
Planning for Bushfire Protection	Bushfire mitigation and protection	http://www.rfs.nsw.gov.au/file_system/attachments/State08/Attachment_20070301_0A17F845.pdf
NSW Floodplain Development Manual 2005	Flooding	http://www.environment.nsw.gov.au/floodplains/manual.htm
Australian Standards		
AS3959	Construction of buildings in bushfire-prone areas	

It is noted that legislative changes are made from time to time, and to that end, NSW legislation can be found at <http://www.legislation.nsw.gov.au/>

MINUTES OF THE DEVELOPMENT COMMITTEE MEETING HELD ON TUESDAY, 6 MAY, 2014 IN THE COUNCIL CHAMBERS, CITY ADMINISTRATIVE CENTRE, BRIDGE ROAD, NOWRA COMMENCING AT 4.06 PM

1. Draft Development Control Plan No. 126 Badgee Urban Release Area Sussex Inlet – Exhibition Outcomes File 47610E (PDR)
-

Mr Ralph Lucas addressed the Committee at the commencement of the meeting in relation to this matter.

Ms Dawn Pierce addressed the Committee at the commencement of the meeting in relation to this matter.

Ms Gail Drummond addressed the Committee at the commencement of the meeting in relation to this matter.

Ms Linda Evans addressed the Committee at the commencement of the meeting in relation to this matter.

Conflict of Interest Declaration - Clr Watson – less than significant non pecuniary interest – one of the objectors is known to him - remained in the room.

MOTION:

Moved: Watson / Second: White

RESOLVED that, in accordance with the Committee delegated authority from Council:

- a) **Adopt the exhibited plan and receive the outcomes of the exhibition of draft Development Control Plan (DCP) No. 126 for Badgee Urban Release Area for information;**
- b) **Make the following changes to the DCP document:**
 - i) **Include a provision to ensure the development provides adequate public passive recreation spaces, consistent with the development requirements for a local park as per Councils Public Open Space Plan 2008.**
 - ii) **Acceptable Solution A1.2 of Section 3.1 Transport Movement Hierarchy include cycle ways to be included in the development application and for the pedestrian pathway shown on the Precinct Concept Plan be identified as a shared pedestrian/cycleway.**
 - iii) **The mandatory control of dog proof fencing be deleted from the DCP;**
 - iv) **Contributions provision be included into the DCP identifying that local infrastructure requirements will be provided as conditions of consent and development will have levied contributions towards community infrastructure as per the Shoalhaven Contributions Plan 2010 and Council's Development Servicing Plan.**

- v) **Include the need to retain hollow-bearing trees within APZ's in Objective No. 2 under section 3.2.3;**
Landscaping Strategy objective 3.7.2 (2) be amended to read "to promote biodiversity through careful native plant selection, of local provenance";
Include the Coastal Protection Act 1979 under "Other Legislation" that needs to be checked.
- vi) **The wording requiring a Tree and Vegetation Plan in the Section 2.2 "Information Required with Subdivision Applications" be revised to provide more clarity on the requirement of a Tree and Vegetation Plan.**
- c) **Adopt the roundabout solution as the preferred option and negotiate with RMS as it will require adjustment to the road conditions;**
- d) **Accept the proposal for a temporary flood free fire trail, managed by gating, and the staging of flood free access.**

The following ALTERATION was suggested by Clr Findley, but was not accepted by the mover.

That the matter not be dealt with under delegated authority and be deferred to the Ordinary meeting of Council.

MOTION CARRIED

FOR: Tribe, Robertson, Kearney, Anstiss, White, Wells, Baptist, Watson, Kitchener and Russ Pigg.

AGAINST: Findley

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1 Purpose

The purpose of this Chapter is to facilitate the development of land in the URA in accordance with the provisions of Part 6 Urban Release Areas of the Shoalhaven Local Environmental Plan 2014.

Advisory note: In addition to the provisions outlined in this chapter, you must refer to the supporting map 'Chapter S2: Roundabout Concept Plan – Sussex Inlet Road' and supporting document 'Environmental Management Plan Guide'.

2 Application

This chapter applies to the area known as the Badgee Urban Release Area (URA), as shown in Figure 1 below. The land is located approximately 45km south of Nowra at Sussex Inlet.

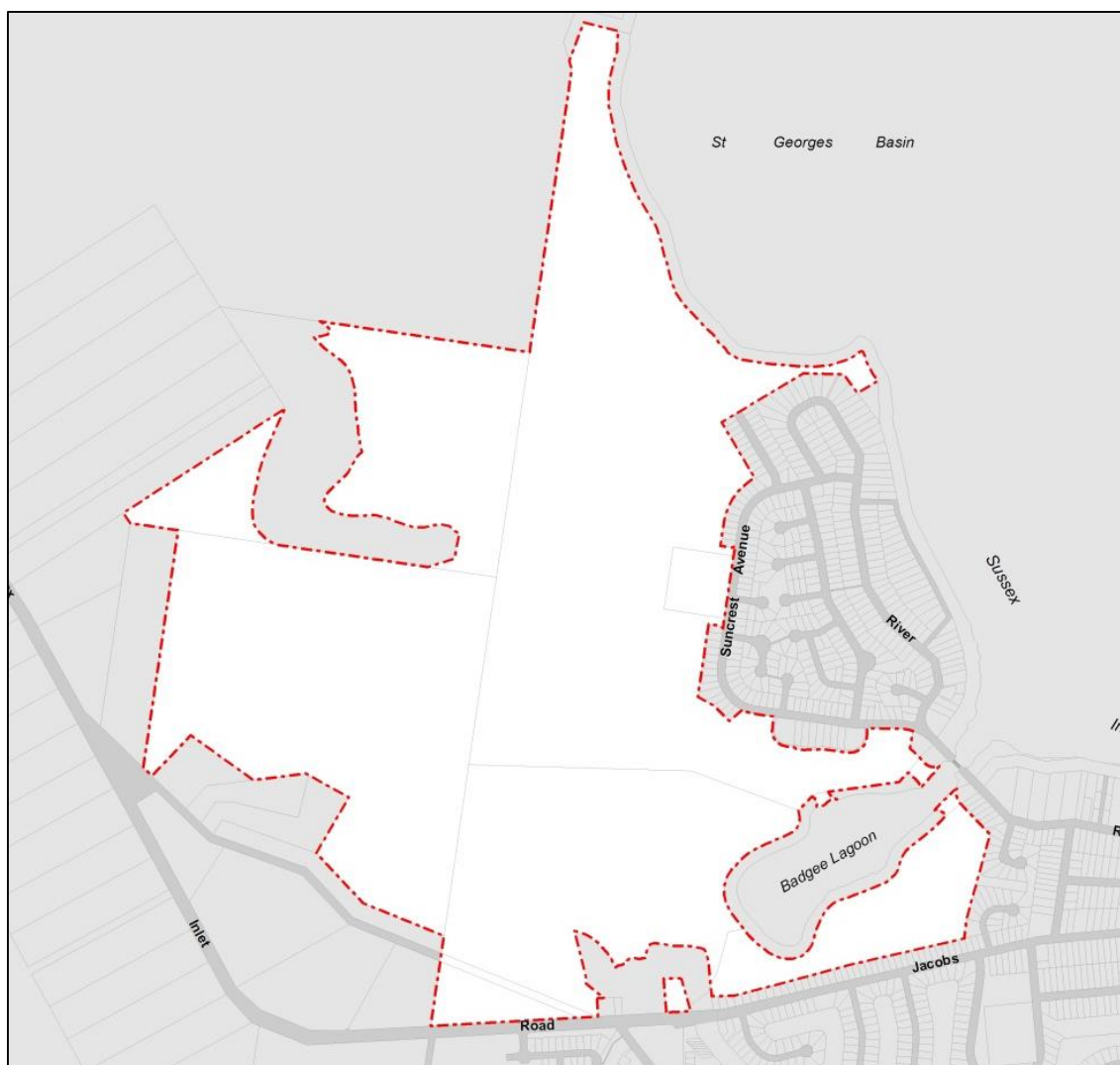


Figure 1: Subject Land Map

3 Context

The Badgee URA has been the subject of detailed investigations in relation to the potential for urban development as supported by the Sussex Inlet Settlement Strategy (SISS) and the South Coast Regional Strategy (SCRS). In 2007, Council resolved to rezone the subject land. A Local Environmental Study was completed which formed the basis for a Planning Proposal, which was exhibited in 2012. Council resolved to adopt the Planning Proposal and submit it to the Department of Planning and Environment.

The rezoning was subsequently gazetted in 2013, with two areas of land being deferred from the Plan. The URA has therefore been rezoned to include R1 General Residential, RE2 Private Recreation and E2 Environmental Conservation as shown in Figure 2 below.

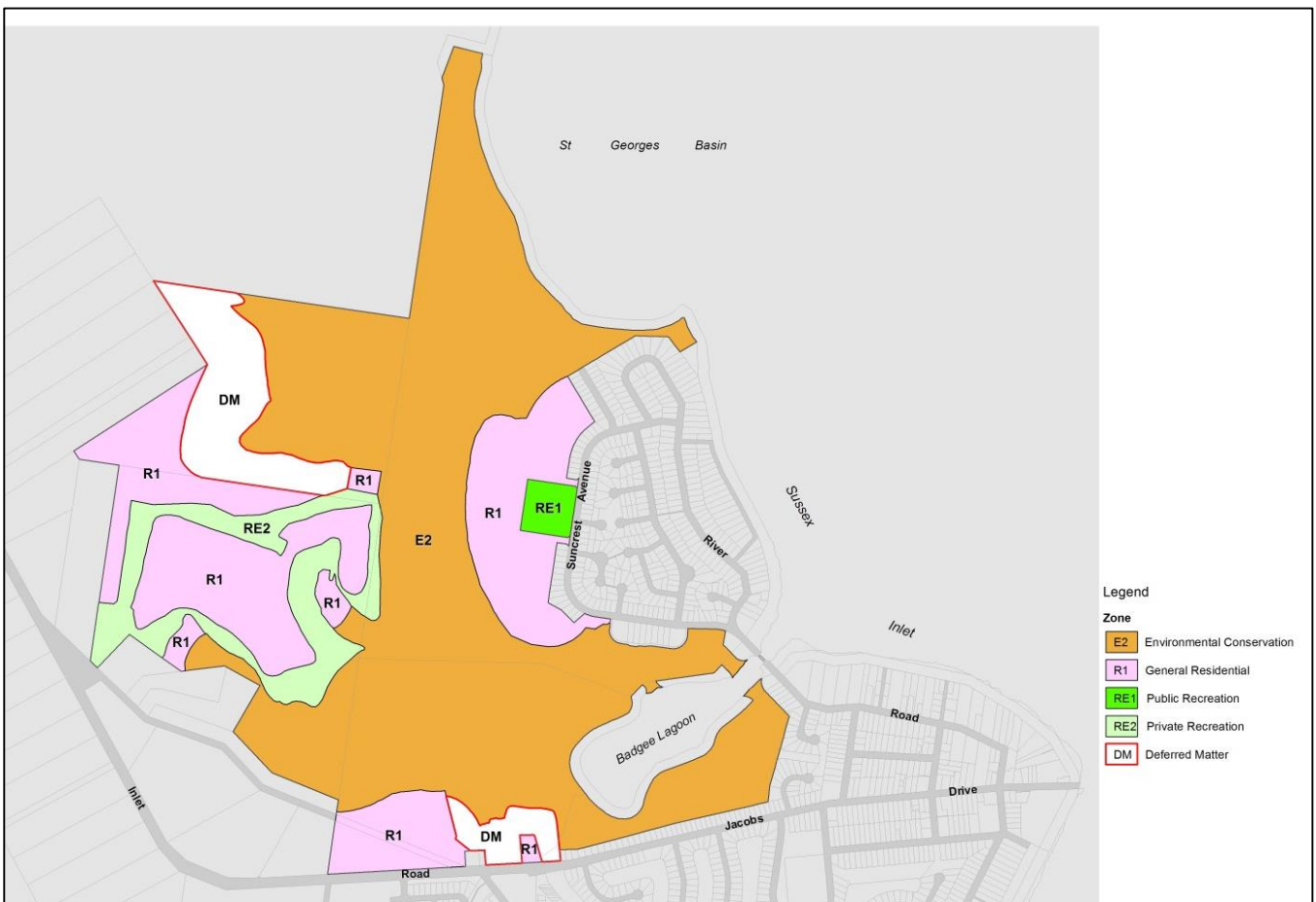


Figure 2: SLEP 2014 Land Zoning Map

4 Vision

The Badgee URA is an extension to the settlement of Sussex Inlet and will strike a balance between urban development of varying densities, conservation and recreation, adjacent to the tidal Badgee Lagoon wetland.

5 Controls

5.1 Desired Character of Badgee URA

5.1.1 Eastern Precinct Desired Character

Relatively low density residential development and extensive open space linkages (including within Asset Protection Zones (APZs)) are appropriate for this precinct and will form a compatible extension to the existing adjoining urban area. The R1 General Residential zone provides for a variety of residential development and other small scale urban uses.

A main east-west flood free access road is to be provided commencing from the southern side of the existing Council open space area zoned RE1 Public Recreation and continuing through the Central and Western precincts.

The Council owned open space area zoned RE1 Public Recreation is to be integrated into this precinct to create a safe, useable link to the existing, adjoining urban area. The RE1 zoned land is to be connected to the residential areas by pathways.

The southern boundary of this precinct adjoins the Badgee Lagoon and SEPP 14 Wetland No. 306. The western boundary of this precinct adjoins the central wildlife corridor that under the SCRS are High Conservation Value (HCV) areas. Setbacks and buffers to these sensitive areas are necessary to ensure no edge effect impacts from development of this precinct.

5.1.2 Western Precinct Desired Character

Large parts of this precinct are cleared or disturbed by the existing Sussex Inlet Golf Course. This area provides opportunity for a variety of residential development densities and other associated urban uses that may include recreation, small scale shopping and community uses. This precinct provides the 'hub' which will assist in diversifying housing types, locating any community or commercial uses and increasing social inter-connections.

The area zoned RE2 Private Recreation provides for the existing golf course and any associated structures and/or uses. There are two small degraded waterways within the RE2 zone which are to be rehabilitated and included as part of the open space network. The golf course/ open space zoned areas are to be connected by pathways to the 'hub'.

A main central link road will provide the flood free access road commencing in the Eastern precinct through to Sussex Inlet Road.

The southern boundary of this precinct adjoins the Badgee Lagoon and SEPP 14 Wetland No. 306. The eastern and northern boundaries of this precinct adjoin the central wildlife corridor. These are HCV areas, under the SCRS. Setbacks and buffers to these sensitive areas are necessary to ensure no edge effect impacts from development of this precinct.

5.1.3 Southern Precinct Desired Character

Large areas of this isolated precinct are below the 3.1m flood level and are either forested or disturbed by previous quarry or gravel pit use. Relatively low density residential development and extensive open space linkages (including within APZs) are appropriate for the parts of this isolated precinct that are above the 1% AEP (Annual Exceedance Probability).

Chapter S2: Badgee Urban Release Area

This precinct is generally bounded by the Badgee Lagoon, SEPP 14 Wetland No. 306 and Jacobs Drive/ Sussex Inlet Road. Setbacks and buffers to the sensitive areas are necessary to ensure no edge effect impacts from development of this precinct.

Road connections are to be formed at two locations along Jacobs Drive/ Sussex Inlet Road.

5.1.4 Central Precinct Desired Character

This precinct comprises the most significant environmental attributes of the URA, including areas adjoining SEPP 14 Wetlands No. 311 and 306, large areas of endangered ecological communities (EECs) as well as the central wildlife corridor. These are HCV areas, under the SCRS.

As identified in Figure 3, shared pedestrian/cycleways are to be constructed along the length of the flood free access road to facilitate pedestrian and cycle access between the Eastern and Western Precincts. The pathway on one side of the access road will require a width of 2m to provide for a shared cycleway/footpath in addition to the requirements of the Engineering Design Specifications attached to Shoalhaven DCP Chapter G11 Subdivision of Land.

An Environmental Management Plan is to be prepared by a suitably qualified person for this precinct to guide the use and ongoing management of the precinct into the future. This must be prepared in conjunction with the first stage of subdivision.

5.1.5 Objectives

- i. Ensure the desired character of the Badgee URA provides a balance between urban development of varying densities, conservation and recreation.
- ii. Ensure each of the four Precincts are developed in accordance with the desired character.
- iii. To adopt building form and scale that creates and enhances the desired character of each Precinct.

5.1.6 Performance criteria and acceptable solutions

Performance Criteria		Acceptable Solutions	
P1	Development subject to this Chapter will create or contribute to the desired character of each precinct in the URA.	A1.1	The development application includes a detailed statement and plans indicating how the proposed development creates or contributes to the desired character as outlined in Sections 5.1.1, 5.1.2, 5.1.3, 5.1.4 and 5.1.5.
P2	A range of lot sizes are provided in the URA, to accommodate a range of dwelling types.	A2.1	Compliance with Shoalhaven DCP Chapter G11 Subdivision of Land.

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Performance Criteria	Acceptable Solutions
P3 Built form and scale relates to the desired character of the precinct.	A3.1 Residential building heights will generally be limited to one or two storeys in the Eastern and Southern Precinct. A3.2 Residential, commercial, recreation and community building heights will generally be limited to one or two storeys on the edges of the Western Precinct, and one, two or three storeys in the 'hub' of the Western Precinct.

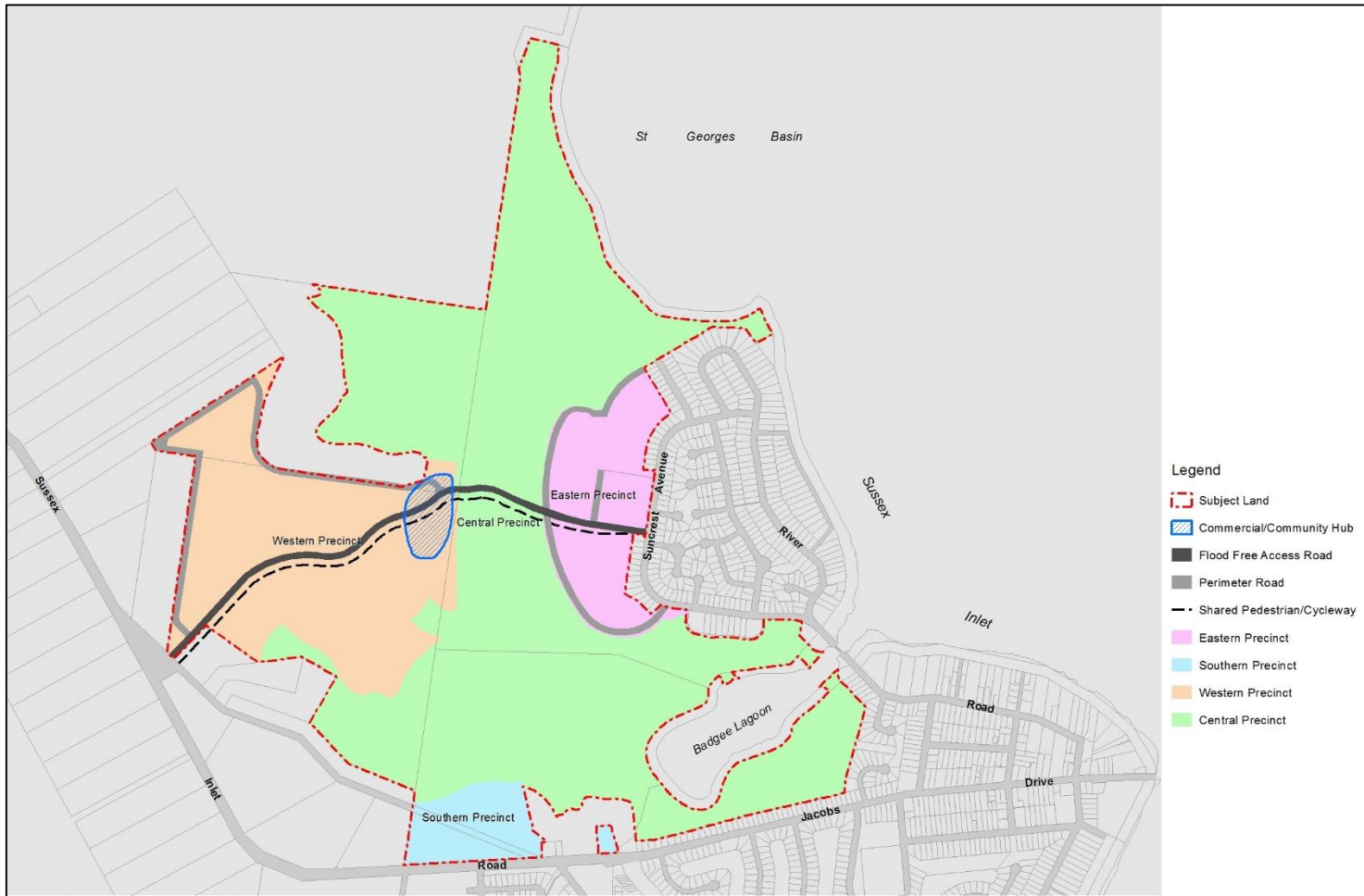


Figure 3: Precinct Concept Plan showing flood free access road

5.2 Subdivision & Staging

Note: State Environmental Planning Policy 71 – Coastal Protection identifies master plan requirements for subdivision in the coastal zone.

5.2.1 Objectives

- i. To ensure development opportunities for residential development identified in the adopted Planning Proposal and Part 6 of SLEP 2014 are realised.
- ii. To ensure the staging of the subdivision allows for timely and efficient release of urban land, specifically in relation to the provision of infrastructure.
- iii. To ensure ongoing protection and maintenance of environmentally significant land.
- iv. To ensure compliance with all relevant requirements including Planning for Bush Fire Protection 2006.
- v. To enhance community interaction and outdoor activity through the provision of public open space.

5.2.2 Mandatory Controls

- C1 All subdivision applications are to include a staging plan, consistent with Figure 4.
- C2 Based on Council's infrastructure availability, initial subdivision stages are to start in the Eastern Precinct followed by the Western Precinct to create the community 'hub'.
- C3 Planning for Bush Fire Protection requirements will be satisfied and APZs will be maintained in perpetuity.

5.2.3 Performance criteria and acceptable solutions

Performance Criteria		Acceptable Solutions	
P4	The APZ will not conflict with or impact on bushland conservation areas or other restrictions on the subject lot or adjoining lots.	A4.1	The URA will be subdivided as shown in Figure 3.
		A4.2	Compliance with Shoalhaven DCP Chapter G11 Subdivision of Land.
P5	Provide local public reserves throughout the URA with adequate road frontages.	A5.1	Local public reserves are provided at a rate of 12sqm per person.
		A5.2	Reserves must comply with the development requirements for a 'local park' as per Council's Public Open Space Plan 2008.

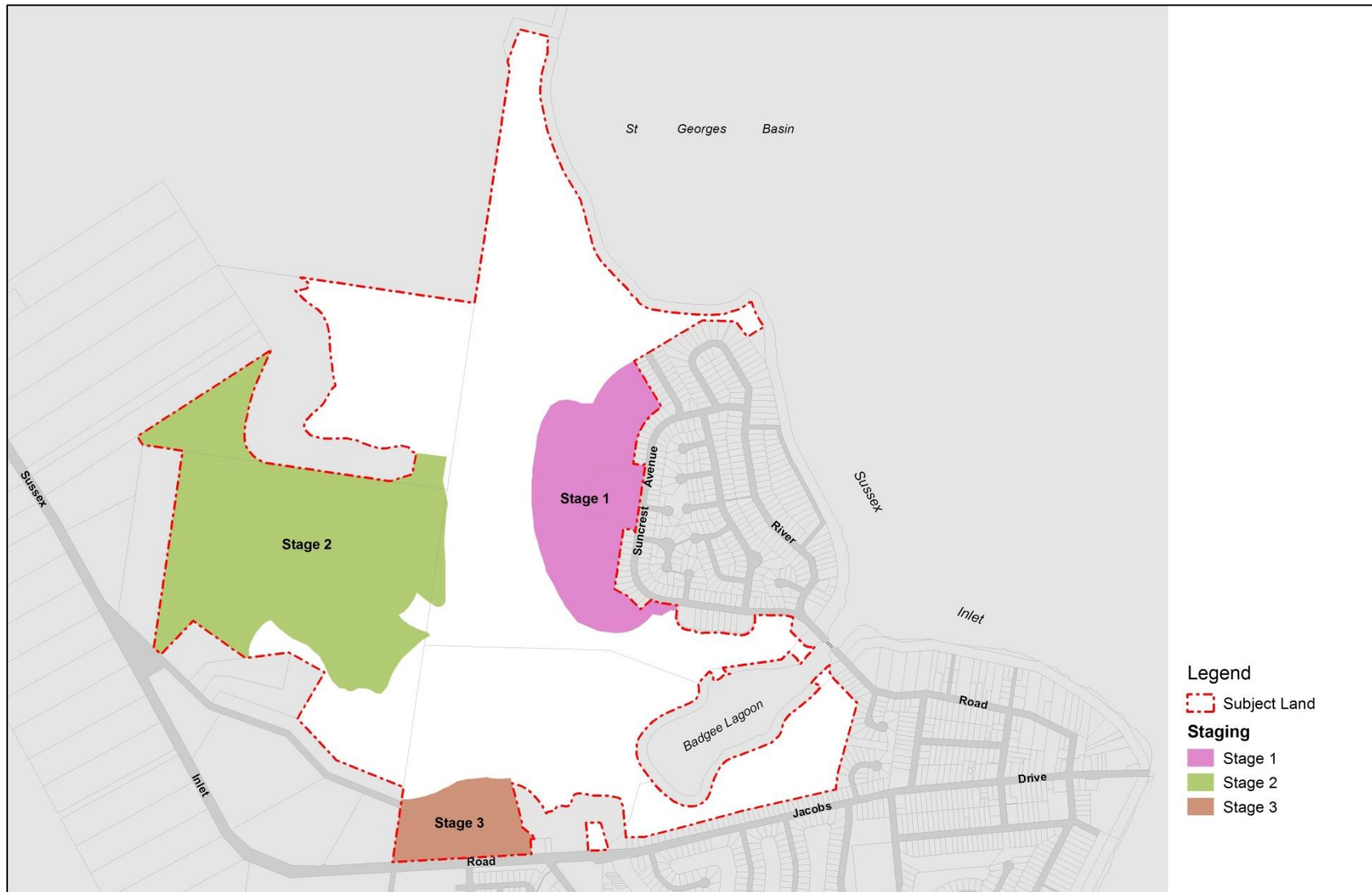


Figure 4: Staging Plan

5.3 Flooding and Flood Free Access Road

Flood studies covering the Badgee area have identified some existing and future development areas to be flood affected and/or isolated in the event of a flood. Specific requirements are therefore identified below in addition to the provisions in Shoalhaven DCP Chapter G9 Development on Flood Prone Land. In particular, construction of a flood free access road (FFAR) is required to ensure safe and timely evacuation in a flood event.

At the commencement of development in the Eastern Precinct, a permanent FFAR is required to be constructed in its entirety between the Eastern and Western Precincts. However, should the staging of development be varied from the stages identified in Figure 4, a temporary FFAR may be provided connecting the Eastern and Western Precincts.

The following controls provide guidance in relation to the construction and maintenance of the temporary FFAR until such time as the permanent FFAR is completed.

5.3.1 Objectives

- i. To ensure that development does not increase potential flood risks to people, property and the environment.
- ii. To ensure safe and functional flood free access for emergency service workers and safe egress for the residents of the Sussex Inlet area.
- iii. To provide a flood free access road (FFAR) between the Eastern and Western Precinct.
- iv. To ensure that the provision of a FFAR through the URA is provided from commencement of development in the Western Precinct.
- v. To ensure the FFAR is constructed to Council and Planning for Bush Fire Protection requirements.
- vi. To ensure the temporary FFAR is maintained to ensure safety and functionality and minimise adverse impacts on the E2 zoned lands in the Central Precinct.

5.3.2 Mandatory Controls

- C1 Development complies with the relevant provisions in Shoalhaven DCP Chapter G9 Development on Flood Prone Land.
- C2 The FFAR is to be constructed based on current flood information for the area.
- C3 The FFAR is to commence to the south of the existing Council open space area in the Eastern Precinct.
- C4 The first development application submitted for the Western Precinct shall, at a minimum, include construction of the permanent FFAR within the Western Precinct to Sussex Inlet Road and provision of a temporary FFAR connecting the Western and Eastern Precincts.
- C5 The temporary FFAR shall be in the same alignment as the future permanent FFAR.
- C6 The temporary section of the FFAR must:
 - i. Be constructed to a minimum 2.5m wide pavement and have a min 75mm of compacted, 'non-plastic' gravel material surface; and

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- ii. Have passing bays 6m wide, 15m long and with 75mm thick gravel at minimum 100m spacings along the length of the road; and
 - iii. Comply with Clause 4.1.3 – Access (2) – Property Access of RFS Planning for Bush Fire Protection.
- C7 As a condition of consent, the temporary FFAR will be graded, watered and compacted at least once annually with written confirmation of annual grades to be sent to Council.
- C8 As a condition of consent, lockable gates and associated barriers are provided at each end of the temporary FFAR. Locks and keys are to be provided by the developer and maintained to the satisfaction of SES, RFS and Council.
- C9 As a condition of consent, signage shall be erected within the existing residential area adjacent to the Eastern Precinct, identifying and directing residents to the temporary FFAR and providing 24 hour contact phone numbers of the holders of each of the gate keys.
- C10 As a condition of consent, a community education program shall be undertaken in consultation with Council regarding the use of the temporary FFAR. An annual reminder of its use, including locality map, shall be advertised in the local Sussex Inlet paper(s).
- C11 A management plan for the temporary FFAR shall be submitted with the first development application for the Western Precinct, detailing how and who will be responsible for managing the following:
- i. Maintenance of the road, erosion and sediment control devices, gates/barriers, gate keys and directional/informational signage;
 - ii. Repair of the road after a flood incident; and
 - iii. Weed control within the road reserve.

Note: Council's pavement standards do not override any requirements of the NSW Rural Fire Service but are to be used in conjunction.

5.4 Transport Movement Hierarchy

5.4.1 Objectives

- i. To achieve a simple and safe movement system, throughout the URA, for private vehicles, public transport, pedestrians and cyclists.
- vii. To ensure that a roundabout at the intersection of the Flood Free Access Road and Sussex Inlet Road is built at commencement of development in the Western Precinct.
- ii. To minimise impacts associated with the intersection of the Flood Free Access Road with Sussex Inlet Road.

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5.4.2 Mandatory Controls

- C12 The first subdivision development application submitted for the Western Precinct shall include construction of the roundabout.
- C13 The roundabout is to be constructed as part of the road works for the first subdivision in the Western Precinct.
- C14 The design of the roundabout and associated road and landscaping works are to incorporate measures to minimise impacts of the roundabout on adjoining properties including (but not limited to) safe property access and amenity such as light spill, noise and vegetation removal.
- C15 The design of the roundabout is to incorporate measures to support the speed zone reduction including but not limited to: kerb and gutter, landscaping, signage, street lighting and a footpath/cycleway.

5.4.3 Performance criteria and acceptable solutions

Performance Criteria	Acceptable Solutions
<p>P6 Subdivision includes road networks, traffic management facilities, parking, pathway circulation routes and connections that are safe and appropriate for the scale of development.</p>	<p>A6.1 The transport movement hierarchy is consistent with Figure 3.</p> <p>A6.2 The development application includes roads, pathways, cycleways, traffic management facilities and parking that support appropriate linkages within and to/from the URA.</p> <p>A6.3 Compliance with Shoalhaven DCP Chapter G11 Subdivision of Land.</p>
<p>P7 Design of Sussex Inlet Road intersection and roundabout includes features and measures to minimise impact on nearby properties.</p>	<p>A7.1 The intersection and roundabout on Sussex Inlet Road is consistent with the supporting map entitled 'Chapter S2: Roundabout Concept Plan – Sussex Inlet Road'.</p> <p>A7.2 The following matters are to be addressed in the design of the roundabout and associated road and landscaping works:</p> <ul style="list-style-type: none"> • Turning lanes to accommodate a 12.5m rigid vehicle for access to/from Lot 95 DP 26638 (924 Sussex Inlet Road) and Lot 96 DP 26638 (932 Sussex Inlet Road); • Access to/from roundabout for approved subdivision SF10392 of Lot 106 DP26639 (919 Sussex Inlet Road); • Extension of driveways to match into roundabout where required;

Performance Criteria	Acceptable Solutions
	<ul style="list-style-type: none"> • Minimisation of vegetation clearing for construction of roundabout; • Revegetation of the section of Golfcourse Way to be closed; • Screening for headlights, such as landscape mounds and/or other barriers such as jersey kerbs; • Landscaping including planting of vegetation along western boundaries of Lot 4 DP 568283 (15 Golfcourse Way) and Lot 4 DP713052 (22 Golfcourse Way); and • Stormwater management.

Note: The supporting map 'Chapter S2: Roundabout Concept Plan – Sussex Inlet Road' is a concept design only. The final location of the roundabout and other design considerations will be subject to detailed engineering design at DA stage.

5.5 Biodiversity Conservation

Detailed flora and fauna investigations undertaken from 2007 to 2010 identified a range of threatened fauna species such as Glossy-black Cockatoos, Yellow-bellied Gliders, Eastern Pygmy Possums, Owls, and bats. Two threatened orchids (*Pterostylis ventricosa* and *Cryptostylis hunteriana*) were also identified within the URA.

Four of the eight vegetation types identified within the URA are considered to be part of broader EECs, being:

- Coastal Sand Swamp Forest, which is part of the *Swamp Sclerophyll Forest on Coastal Floodplains of the New South Wales North Coast, Sydney Basin and South East Corner Bioregions* and/or *Bangalay Sand forest of the Sydney Basin and South East Corner Bioregions*;
- Estuarine Fringe Forest, which is part of the *Swamp Oak Floodplain Forest of the New South Wales North Coast, Sydney Basin and South East Corner Bioregions*;
- Estuarine Creek-flat Scrub, which is part of the *Swamp Sclerophyll Forest on Coastal Floodplains of the New South Wales North Coast, Sydney Basin and South East Corner Bioregions*; and
- Estuarine Saltmarsh, which is part of the *Coastal Saltmarsh in the New South Wales North Coast, Sydney Basin and South East Corner Bioregions*.

Habitat for most of the threatened fauna and orchids in the URA will largely be retained in the E2 Environmental Conservation zoned lands. The location of this zone has been designed to contain most of the important habitat trees and provide habitat linkages.

5.5.1 Legal requirements for considering the impact of proposed development

The NSW *Threatened Species Conservation Act 1995* (TSC Act) provides for the conservation of threatened species, populations and ecological communities of animals and plants. Section 5A of the *Environmental Planning and Assessment Act 1979* (EP&A Act) sets out a 'seven-part test' for considering the potential impact of a proposed development on critical habitat, threatened species, populations or endangered ecological communities, and their habitats.

As development of land in the URA will potentially impact on known threatened species habitat, a seven-part test will be legally required as part of the development assessment process. A Species Impact Statement (SIS) will need to be prepared if the seven-part test concludes that there will be a significant impact.

5.5.2 Objectives

- i. To restore, protect and enhance biodiversity value of the vegetated areas, including any areas which are currently degraded.
- ii. To encourage the retention of important habitat trees, including hollow bearing trees within APZs.
- iii. To ensure any known sites of the threatened orchid, *Pterostylis ventricosa* and *Cryptostylis hunteriana* are managed to ensure no individuals are harmed or removed without the required assessment and approval.
- iv. To ensure any residential development is sensitively designed and managed to protect the integrity of surrounding vegetated areas.

5.5.3 Mandatory Controls

- C1 An Environmental Management Plan (EMP) over the Central Precinct must be prepared in conjunction with the first stage of subdivision. Refer to Section 6.1 for EMP requirements.
- C2 Noxious and/or environmental weeds will be removed from all land.

5.5.4 Performance criteria and acceptable solutions

Performance Criteria		Acceptable Solutions	
P8	Significant impacts on the threatened orchids <i>Pterostylis ventricosa</i> and <i>Cryptostylis hunteriana</i> will be avoided.	A8.1	All known individuals of the threatened orchids <i>Pterostylis ventricosa</i> and <i>Cryptostylis hunteriana</i> will be retained and protected. Alternatively, a seven-part test and if necessary, a Species Impact Statement (SIS) is provided by the applicant.
P9	Trees that will be retained will be protected from potentially	A9.1	Trees and vegetation will be retained and protected in accordance with AS4970 and as such protection measures are indicated at application stage.

Chapter S2: Badgee Urban Release Area

Performance Criteria	Acceptable Solutions
damaging activities during construction.	A9.2 Building material and other items will not be stockpiled within the root zones of any important habitat trees or vegetation that have been retained within the APZ.

5.6 Bushfire Risk Management

The URA is identified as Bushfire Prone Land on mapping endorsed by the NSW Rural Fire Service. Application for subdivision in a bush fire prone area is integrated development and requires a Bush Fire Safety Authority under section 100B of the *Rural Fires Act 1997*. Application for subdivision must be accompanied by a bush fire risk assessment report.

5.6.1 Objectives

- i. To ensure that appropriate asset protection zones (APZs) are provided and maintained to separate development from potential bush fire hazards.
- ii. To ensure that all bush fire protection measures, including the maintenance of fuel loads in APZs and perimeter fire trails are able to be maintained.
- iii. To ensure that appropriate vehicular access is provided to cater for fire fighting trucks and other emergency vehicles.
- iv. To ensure that bushfire mitigation measures are undertaken in a manner consistent with the known environmental constraints.

5.6.2 Mandatory Controls

C1 All Asset Protection Zones (APZs) are located within the R1 and RE2 zones.

5.6.3 Performance criteria and acceptable solutions

Performance Criteria	Acceptable Solutions
P10 Environmental attributes within APZs are appropriately managed.	<p>A10.1 APZs will be established with dimensions specified by Planning for Bush Fire Protection.</p> <p>A10.2 Important habitat trees or threatened species within the APZs will be retained and managed in accordance with the RFS's Standards for Asset Protection Zones (available at http://www.rfs.nsw.gov.au).</p> <div style="background-color: #e0e0e0; padding: 5px;"> <p>Notes:</p> <ul style="list-style-type: none"> 1. Reduction of fuel does not require removal of all vegetation. 2. Native trees and shrubs should be retained as clumps or islands and should maintain a covering of no more than 20% of the area. </div>

Performance Criteria	Acceptable Solutions
P11 Fire trails, where required, are to be designed, constructed and maintained in a manner that avoids impact on water quality by minimising erosion and appropriately controlling sediment.	A11.1 Compliance with Planning for Bush Fire Protection.

5.7 Stormwater Management

An east-west orientated ridge dissects the URA dividing the site into two main catchments, north of the ridge draining directly to St Georges Basin, and south of the ridge draining to Badgee Lagoon. Groundwater is likely to be at high levels particularly in the lower parts of the URA. The sensitive hydrologic environment requires consideration of stormwater management measures at both a local scale, when individual developments are undertaken, and also at a broader subdivision scale, generally when larger infrastructure works are undertaken.

5.7.1 Objectives

- i. Protect and enhance natural watercourses and their associated ecosystems and ecological processes.
- ii. Mitigate the impacts of development on water quality and quantity.
- iii. To ensure compliance with Water Sensitive Urban Design principles including:
 - a. protection of the natural hydrological and ecological processes;
 - b. maintenance of the natural hydrological behaviour of catchments;
 - c. protection of water quality of surface and ground waters; and
 - d. enhancement of visual, social, cultural and ecological values.

5.7.2 Performance criteria and acceptable solutions

Performance Criteria	Acceptable Solutions
P12 The development creates a neutral or beneficial stormwater impact on: <ul style="list-style-type: none"> • The E2 zone from the R1 and RE2 zones; and • The receiving waters of Badgee Lagoon SEPP 14 Wetland and St Georges Basin. 	<p>A12.1 An Assessment is prepared showing compliance with Water Sensitive Urban Design principles and levels and forms of On-site Stormwater Detention.</p> <p>A12.2 Compliance with Shoalhaven DCP Chapter G2 Sustainable Stormwater Management and Erosion and Sediment Control.</p> <p>A12.3 Compliance with Shoalhaven DCP Chapter G11 Subdivision of Land.</p>

5.8 Landscaping Strategy

5.8.1 Objectives

- i. To protect and maintain riparian areas and remnant vegetation.
- ii. To promote biodiversity through careful native plant selection of local provenance.
- iii. To enhance both the public and private domain within the URA, especially visually prominent public open space areas.
- iv. To contribute to the overall water sensitive urban design approach within the URA.

5.8.2 Performance criteria and acceptable solutions

Performance Criteria	Acceptable Solutions
<p>P26 Any subdivision includes a detailed landscape strategy that complements and is characterised by the native vegetation and softens the built form.</p>	<p>A26.1 The landscape strategy for the subdivision is prepared by a suitably qualified person and includes, as a minimum:</p> <ul style="list-style-type: none"> • extensive landscaping and street tree planting based around local native species; • protection of riparian areas; • landmark tree planting in entry locations and the community 'hub'; • continuity and consistency in the streetscape and street furniture; • some deep soil planting to enable a substantial tree cover to be created over time; and • removal of noxious species. <p>A26.2 Compliance with Shoalhaven DCP Chapter G3 Landscaping Design Guidelines.</p> <p>A26.3 Compliance with Shoalhaven DCP Chapter G11 Subdivision of Land.</p>

6 Advisory Information

6.1 Environmental Management Plan (EMP) requirements

The EMP must be prepared in accordance with the supporting document 'Environmental Management Plan Guide' which sets out the following minimum requirements:

1. Statement of Commitments;
2. Site plan;
3. Schedule of works;
4. Monitoring and reporting;
5. Specifications;
6. Contact details; and

7. Qualifications.

6.2 Information required with subdivision applications

In preparing a development application for subdivision development within the URA, your application must include:

- Plans of the proposed development including:
 - Site Analysis Plan showing relevant attributes of the site in relation to adjoining land, such as topographic features, orientation of lots, character of surrounding development, flooding drainage constraints, opportunities to link to open space/commercial hubs, provision of services, asset protection zones and vegetation corridors.
 - Fully dimensioned plan of subdivision including, where relevant, staging schedule.
 - A tree and vegetation plan showing specific trees to be retained and trees to be removed or lopped within the Asset Protection Zones (APZs), showing significant individual trees such as Hollow Bearing Trees and Feed Trees which are to be retained. Outside of the APZs, a more general plan may be provided showing areas where trees and vegetation are to be removed or retained.
 - Preliminary Engineering Plans are required for all subdivision, with particular reference to land or infrastructure to be dedicated to Council.
- A Soil and Water Management Plan.
- Statement of Environmental Effects (SEE) detailing compliance with this Chapter and any other relevant Chapters of Shoalhaven DCP 2014 and statutory requirements. The SEE is to include a Variation Statement if any variation to any DCP requirements is sought.
- The following MAY be required with a development application:
 - A Threatened Species Assessment.
 - A Bushfire Risk Assessment Report.
 - An Effluent Disposal Assessment.
 - A Drainage/Stormwater Assessment.
 - A Hydraulic Assessment.
 - A Traffic Study.

6.3 Contributions

Local infrastructure requirements are to be provided as conditions of consent and development will include contributions levied towards community infrastructure in line with Council's Contributions Plan and Development Servicing Plans for Water Supply and Sewerage Services.

6.4 Other legislation or policies you may need to check

Note: This section is not exclusive and you may be required to consider other legislation, policies and other documents with your application

Council Policies & Guidelines	<ul style="list-style-type: none">• Contributions Plan• Development Servicing Plans for Sewerage Services 2005• Development Servicing Plans for Water Supply Services 2005• Public Open Space Plan 2008
External Policies & Guidelines	<ul style="list-style-type: none">• AS4970 Protection of trees on development sites• Planning for Bush Fire Protection 2006• Standards for Asset Protection Zones 2006• State Environmental Planning Policy No 14 – Coastal Wetlands• State Environmental Planning Policy No 71 – Coastal Protection
Legislation	<ul style="list-style-type: none">• <i>Coastal Protection Act 1979</i>• <i>Environmental Planning and Assessment Act 1979</i>• <i>Rural Fires Act 1997</i>• <i>Threatened Species Conservation Act 1995</i>

Changes made to draft DCP No. 126 since adoption

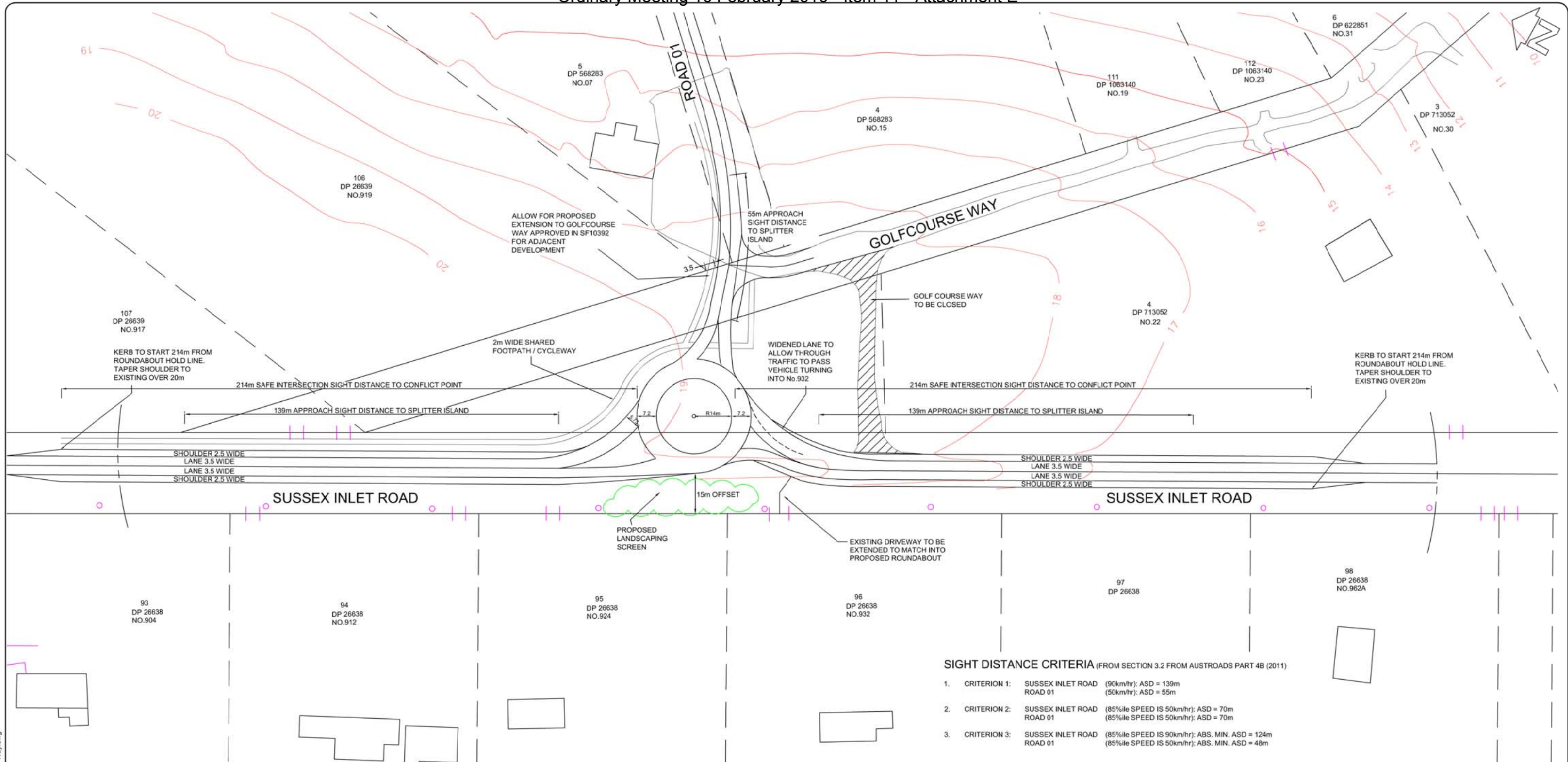
DCP Section	Changes	Comment
Whole document	<ul style="list-style-type: none"> Put into Shoalhaven DCP 2014 chapter format Renumber sections Update DCP references to reflect Shoalhaven DCP 2014 Chapter names Minor typographical changes 	<ul style="list-style-type: none"> All DCP chapters must conform to the Shoalhaven DCP 2014 format Sections renumbered in response to changes outlined below and errors in numbering in draft DCP No. 126 Improve readability and correct minor typographical errors
1.1 Where this DCP applies	<ul style="list-style-type: none"> Moved to Section 2. Application 	<ul style="list-style-type: none"> Consistency with other DCP chapters
1.2 Key objective	<ul style="list-style-type: none"> Moved to Section 1. Purpose 	<ul style="list-style-type: none"> Consistency with other DCP chapters
New Section 1. Purpose	<ul style="list-style-type: none"> Insert advisory note as follows: <i>In addition to the provisions outlined in this chapter, you must refer to the supporting map 'Chapter S2: Roundabout Concept Plan – Sussex Inlet Road' and supporting document 'Environmental Management Plan Guide'</i> 	<ul style="list-style-type: none"> Roundabout Concept Plan and Environmental Management Plan Guide are new supporting maps and documents for this DCP
1.3 Context/Background	<ul style="list-style-type: none"> Moved to Section 3. Context 	<ul style="list-style-type: none"> Consistency with other DCP chapters
1.4 Vision for Badgee URA	<ul style="list-style-type: none"> Moved to Section 4. Vision 	<ul style="list-style-type: none"> Consistency with other DCP chapters
1.5 Relationship to other plans	<ul style="list-style-type: none"> Deleted 	<ul style="list-style-type: none"> Provisions included in Chapter 1 Introduction of Shoalhaven DCP 2014
1.6 Definitions and abbreviations	<ul style="list-style-type: none"> Deleted 	<ul style="list-style-type: none"> Provisions included in Dictionary of Shoalhaven DCP 2014
2.1 How to Address the Requirements of this Plan	<ul style="list-style-type: none"> Deleted 	<ul style="list-style-type: none"> Provisions included in Chapter 1 Introduction of Shoalhaven DCP 2014
2.2 Information Required with Subdivision Applications (now Section 6.2)	<ul style="list-style-type: none"> Moved to Section 6 Advisory Information Revise wording of the Tree and Vegetation Plan requirements to state: <i>A tree and vegetation plan showing trees to be retained and trees to be removed or lopped within the Asset Protection Zone (APZ). Outside of the APZ, the plan must show areas where trees and vegetation to be cleared or preserved and significant individual trees such as Hollow Bearing Trees and Feed Trees to be retained.</i> 	<ul style="list-style-type: none"> Consistency with other DCP chapters To provide more clarity on what is required to be submitted as part of a Tree and Vegetation Plan pursuant to part b)vi) of Development Committee resolution

DCP Section	Changes	Comment
2.3 Variations to Acceptable Solutions	<ul style="list-style-type: none"> Deleted 	<ul style="list-style-type: none"> Provisions included in Chapter 1 Introduction of Shoalhaven DCP 2014
3.1.1 Eastern Precinct Desired Character (now Section 5.1.1)	<ul style="list-style-type: none"> Reword to note that FFAR is to commence on the southern side of the existing Council open space area on Suncrest Avenue, instead of the northern side 	<ul style="list-style-type: none"> Preliminary assessment of DA SF10425 by Council's Traffic and Transport Unit shows that an intersection on Suncrest Avenue to the northern side of the reserve would require a roundabout to be built due to sight distance issues at that location. As there is adequate sight distance to the southern side of the reserve, the route has been amended to show the FFAR connecting with Suncrest Avenue to the north of Blue Mist Close.
3.1.5 Central Precinct Desired Character (now Section 5.1.4) & Figure 3	<ul style="list-style-type: none"> Reword to note that pathways along FFAR are to be shared pedestrian/cycleways and amend Figure 3 to show shared pedestrian/cycleway Change reference from 'Conservation Management Plan' to 'Environmental Management Plan' (EMP) 	<ul style="list-style-type: none"> Pedestrian pathway shown on the Precinct Concept Plan is now shown as shared pedestrian/cycleway and desired character statement should reflect this as per b)ii) of Development Committee resolution which requires shared pedestrian/cycleway be provided along the Flood Free Access Road Update to terminology – Conservation Management Plans usually relate to heritage conservation rather than management of environmental areas
Section 5, Figure 3	<ul style="list-style-type: none"> Insert amended Figure 3 to show FFAR commencing on the southern side of the existing Council open space area, instead of the northern side 	<ul style="list-style-type: none"> Preliminary assessment of DA SF10425 by Council's Traffic and Transport Unit shows that an intersection on Suncrest Avenue to the northern side of the reserve would require a roundabout to be built due to sight distance issues at that location. As there is adequate sight distance to the southern side of the reserve, the route has been amended to show the FFAR connecting with Suncrest Avenue to the north of Blue Mist Close.
3.1.6 Performance criteria and acceptable solutions, Acceptable Solution A1.1 (now Section 5.1.6)	<ul style="list-style-type: none"> Update Sections referred to in A1.1 to ensure consistency with new section numbering 	<ul style="list-style-type: none"> Typographical change
3.2 Subdivision & Staging (now Section 5.2)	<ul style="list-style-type: none"> Insert advisory note as follows: State Environmental Planning Policy No 71 – Coastal Protection identifies master plan requirements for subdivision in the coastal zone 	<ul style="list-style-type: none"> SEPP 71 applies to the site and a master plan may be required to be submitted for subdivision of the URA as it is partly located in the coastal zone and is partly identified as a sensitive coastal location

DCP Section	Changes	Comment
3.2 Subdivision & Staging, Figure 3	<ul style="list-style-type: none"> Move Figure 3 to end of Section 5.1 Desired Character of Badgee URA 	<ul style="list-style-type: none"> Section 5.1 references Figure 3 so it is more appropriate to put in that section
3.2 Subdivision & Staging, 3.2.1 Objectives, Objectives (now Section 5.2.1)	<ul style="list-style-type: none"> Delete Objective: <i>To ensure the provision of the Flood Free Access Road is in conjunction with the first stage of subdivision</i> and move to new Section 5.3 Flooding and Flood Free Access Road Insert new Objective (v): <i>To enhance community interaction and outdoor activity through the provision of public open space</i> 	<ul style="list-style-type: none"> Section 5.3 Flooding and Flood Free Access Road provides details of temporary and permanent FFAR as adopted by Development Committee Development Committee resolution part b)ii) required inclusion of a provision to ensure the development provides adequate passive recreation spaces, consistent with the development requirements for a local park as per Councils Public Open Space Plan 2008
3.2 Subdivision & Staging, 3.2.2 Mandatory Controls (now Section 5.2.2)	<ul style="list-style-type: none"> Delete Mandatory Control C2, move to Section 5.5.3 Delete Mandatory Controls C4 and C5, move to new Section 5.3 Flooding and Flood Free Access Road Delete text box relating to Conservation Management Plan requirements, move to Section 6 Advisory Information 	<ul style="list-style-type: none"> EMP requirements more appropriate to be included in section on Biodiversity Conservation FFAR controls more appropriate in section specifically related to the FFAR Consistency with other DCP chapters
3.2 Subdivision & Staging, 3.2.3 Performance Criteria and Acceptable Solutions (now Section 5.2.3)	<ul style="list-style-type: none"> Reword Performance Criteria P1, renumber P1 to P4 Insert new Performance Criteria P5: Provide local public reserves throughout the URA with adequate road frontages Update reference to rescinded DCP Insert new Acceptable Solution A5.1: <i>Local public reserves are provided at a rate of 12sqm per person</i> Insert new Acceptable Solution A5.2: <i>Reserves must comply with the development requirements for a 'local park' as per Council's Public Open Space Plan 2008</i> 	<ul style="list-style-type: none"> Requirements of Performance Criteria P1 are covered by new P4 and Acceptable Solution A4.2 New Performance Criteria and Acceptable Solutions have been included pursuant to Development Committee resolution part b)ii) requiring inclusion of a provision to ensure the development provides adequate passive recreation spaces, consistent with the development requirements for a local park as per Councils Public Open Space Plan 2008
New Section 5.3 Flooding and Flood Free Access Road	<ul style="list-style-type: none"> Combine Section 3.4 Flooding with new controls for Flood Free Access Road (permanent and temporary sections) 	<ul style="list-style-type: none"> Temporary FFAR proposal adopted by Development Committee resolution on 6/5/14

DCP Section	Changes	Comment
3.1 Transport Movement Hierarchy (now Section 5.4)	<ul style="list-style-type: none"> • Insert new Objective iii): <i>To minimise impacts associated with the intersection of the Flood Free Access Road with Sussex Inlet Road</i> • Insert new Mandatory Controls to require the following: <ul style="list-style-type: none"> ○ Roundabout to be constructed as part of first DA for the Western Precinct; ○ Design of Sussex Inlet Road intersection and roundabout includes features and measures to minimise impacts on nearby properties; and ○ Roundabout design to incorporate measures to support the speed zone reduction. • Insert new Note: <i>The supporting map 'Chapter S2: Roundabout Concept Plan – Sussex Inlet Road' is a concept design only. The final location of the roundabout and other design considerations will be subject to detailed engineering design at DA stage</i> • Include 'cycleways' in Acceptable Solutions for inclusion in Das 	<ul style="list-style-type: none"> • Part c) of Development Committee resolution adopted a roundabout at Sussex Inlet Road as the preferred option. Consultation with neighbouring landowners and the Roads and Maritime Services (RMS) have informed controls to minimise impact of roundabout on adjoining properties and to address RMS requirement that the road design include features which show the change in environment from a rural road to a slower more urban road environment. • Part b)ii) of Development Committee resolution requires that cycleways be included in DAs
3.2 Biodiversity Conservation, 3.2.3 Objectives (now Section 5.5.2)	<ul style="list-style-type: none"> • Insert a requirement to retain hollow-bearing trees within APZs in Objective ii) 	<ul style="list-style-type: none"> • Part b)v) of Development Committee resolution requires inclusion of this requirement
3.2 Biodiversity Conservation, 3.2.4 Mandatory Controls (now Section 5.5.3)	<ul style="list-style-type: none"> • Insert Mandatory Control requiring preparation of an EMP in conjunction with the first stage of subdivision • Delete Mandatory Control relating to the provision of dog proof fencing around the R1 zoned land 	<ul style="list-style-type: none"> • EMP requirement more appropriate to be included in this section • Part b)iii) of Development Committee resolution requires deletion of this control
3.3 Bushfire Risk Management, 3.3.3 Performance criteria and acceptable solutions (now Section 5.6.3)	<ul style="list-style-type: none"> • Correct reference to RFS document 'Standards for Asset Protection Zones' 	<ul style="list-style-type: none"> • To ensure correct document is referenced
3.4 Flooding	<ul style="list-style-type: none"> • Controls in Section 3.4 Flooding brought forward to new Section 5.3 Flooding and Flood Free Access Road 	<ul style="list-style-type: none"> • To improve readability

DCP Section	Changes	Comment
3.5 Site Contamination	<ul style="list-style-type: none"> Deleted 	<ul style="list-style-type: none"> Controls relating to contamination are now contained in Shoalhaven DCP 2014 Chapter 2 General and Environmental Considerations
3.6 Stormwater Management (now Section 5.7)	<ul style="list-style-type: none"> Delete Objectives 2, 4-9 Delete Performance Criteria P2-P12 Delete Acceptable Solutions A1.3-A1.17 Insert reference to Shoalhaven DCP 2014 Chapter G2 Sustainable Stormwater Management and Sediment and Erosion Control 	<ul style="list-style-type: none"> Relevant generic Objectives and Badgee URA-specific Performance criteria and acceptable solutions have been retained; generic controls relating to stormwater management deleted as they are contained in Shoalhaven DCP 2014 Chapter G2
3.7 Landscaping Strategy, 3.7.1 Objectives (now Section 5.8.1)	<ul style="list-style-type: none"> Amend Objective 2 to state: <i>To promote biodiversity through careful native plant selection of local provenance</i> 	<ul style="list-style-type: none"> Part b)v) of Development Committee resolution requires inclusion of this requirement
New Section 6 Advisory Information	<ul style="list-style-type: none"> Insert new section containing EMP requirements, information required with subdivision application and summary of legislation, policies and other documents referred to in this chapter Attach EMP Guide 	<ul style="list-style-type: none"> Consistency with other DCP chapters To provide guidance on preparation of the EMP
New Section 6.3 Contributions	<ul style="list-style-type: none"> Insert new section for development contributions: <i>Local infrastructure requirements are to be provided as conditions of consent and development will include contributions levied towards community infrastructure in line with Council's Contributions Plan and Development Servicing Plans for Water Supply and Sewerage Services</i> 	<ul style="list-style-type: none"> Part b)iv) of Development Committee resolution requires inclusion of provisions for local infrastructure requirements
4 Other legislation or policies you may need to check (now Section 6.4)	<ul style="list-style-type: none"> Delete and replace with new Section 6.4 Summary of legislation, policies and other documents referred to in this chapter. Only legislation, policies and guidelines referred to within the chapter have been included Coastal Protection Act 1979 included in new Section 6.4 	<ul style="list-style-type: none"> Consistent with Shoalhaven DCP 2014 format and to ensure only key legislation, policies and documents are included Part b)v) of Development Committee resolution requires inclusion of the Coastal Protection Act 1979 as legislation that needs to be checked



SIGHT DISTANCE CRITERIA (FROM SECTION 3.2 FROM AUSTRROADS PART 4B (2011))

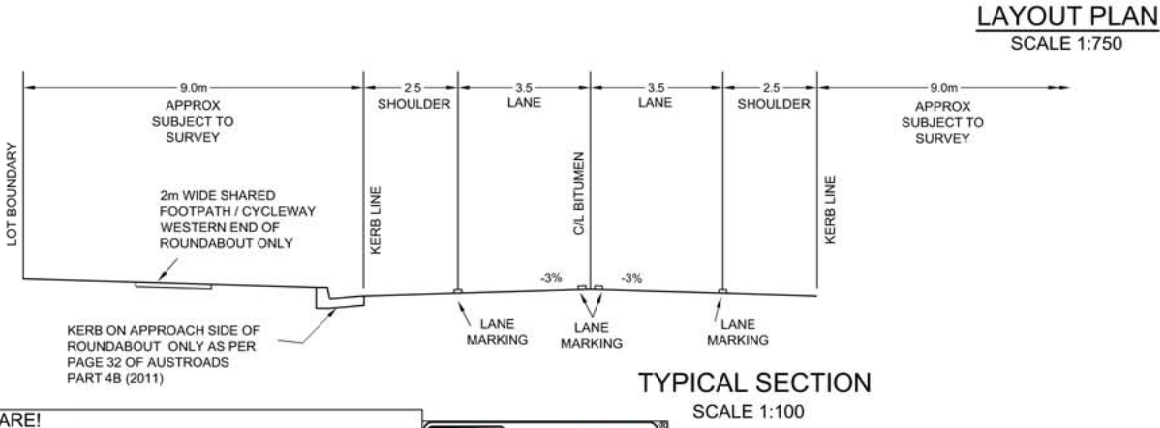
- 1. CRITERION 1: SUSSEX INLET ROAD ROAD 01 (90km/hr): ASD = 139m (50km/hr): ASD = 55m
- 2. CRITERION 2: SUSSEX INLET ROAD ROAD 01 (85%ile SPEED IS 50km/hr): ASD = 70m (85%ile SPEED IS 50km/hr): ASD = 70m
- 3. CRITERION 3: SUSSEX INLET ROAD ROAD 01 (85%ile SPEED IS 90km/hr): ABS. MIN. ASD = 124m (85%ile SPEED IS 50km/hr): ABS. MIN. ASD = 48m

- DESIGN INPUTS:**
- DESIGN SPEED: 90km/hr
 - SAFE INTERSECTION DISTANCE (SID): 214m
 - APPROACH SIGHT DISTANCE (ASD): 139m
 - DESIRED DRIVER SPEED ON FASTEST LEG PRIOR TO ROUNDABOUT = 80km/hr
 - DESIGN VEHICLE- 19m SEMI-TRAILER
 - CENTRAL ISLAND RADII = 14m
 - CIRCULATING CARRIAGEWAY WIDTH = 7.2m
- NOTE:**
- ROAD RESERVE WIDENING TO BE PROVIDED WHERE NECESSARY
 - NO SURVEY HAS BEEN UNDERTAKEN NEAR THE SITE OF THE ROUNDABOUT- DESIGN IS INDICATIVE ONLY.
 - PROPOSED STREET LIGHTING TO AS1158 BETWEEN 214m SIGHT DISTANCE POINTS
 - SIGNAGE AND LINEMARKING TO RMS/SCC REQUIREMENTS & AS1742
 - CLEARING OF ROADSIDE VEGETATION MAY BE REQUIRED TO ENSURE ALL SIGHT DISTANCES ARE MAINTAINED

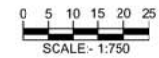
- DENOTES APPROXIMATE LOCATION OF POWER POLE - SUBJECT TO SURVEY
 - || DENOTES APPROXIMATE LOCATION OF DRIVEWAY ACCESS POINT TO PROPERTY- SUBJECT TO SURVEY
- ADJOINING LOTS ARE APPROXIMATE ONLY AND HAVE BEEN ADOPTED FROM DCDB INFORMATION CONTAINED ON BOKOR PLAN
- CADASTRE HAS BEEN COMPILED FROM A COMBINATION OF UNDERLYING PLANS OF SURVEY
- CONTOURS ARE APPROXIMATE AND SHOULD BE TREATED AS INDICATIVE ONLY AND SUBJECT TO SURVEY

LOT	EXISTING DWELLING TO SUSSEX INLET ROAD (PERPENDICULAR TO LOT/SUSSEX INLET ROAD BOUNDARY)	EXISTING DWELLING TO PROPOSED ROUNDABOUT (NEAREST CORNER OF DWELLING PERPENDICULAR TO INSCRIBED CIRCLE Ø42.4)
LOT 93 DP 26638	59.3m	250.7m
LOT 94 DP 26638	74.9m	153.2m
LOT 95 DP 26638	68.5m	102.5m
LOT 96 DP 26638	73.8m	78.8m
LOT 98 DP 26638	41.8m	196m
LOT 4 DP 713052	55.7m	196.3m

NOTE: LOT BOUNDARIES, DWELLING LOCATIONS, DRIVEWAYS AND POWER POLE LOCATIONS HAVE BEEN DERIVED FROM AERIAL PHOTOGRAPHY, GOOGLE STREETVIEW AND DIGITAL CADASTRE DATABASE. THEY SHOULD BE VIEWED AS APPROXIMATE ONLY AND SUBJECT TO SURVEY.



BEWARE!
THE CONTRACTOR IS TO VERIFY THE LOCATION OF ALL EXISTING SERVICES PRIOR TO COMMENCEMENT OF CONSTRUCTION AND SHALL BE RESPONSIBLE, AT THE CONTRACTOR'S EXPENSE, FOR ANY REPAIRS TO DAMAGE CAUSED DURING CONSTRUCTION.



RATIO: 1:750 (AT A1 ORIGINAL)	DATUM: AUSTRALIAN HEIGHT DATUM	SURVEY	APA	REVISION	BY	DATE
	ORIGIN: SSM RL	DESIGN	CJG	01 ROUNDABOUT RELOCATED & WIDENED LANE ADDED	MJP	22.04.2015
	DATE OF PLAN: OCTOBER 2014	DRAWN	CJG	02 ROUNDABOUT RELOCATED AND OTHER DETAILS ADDED	MP	24-8-2015
		CHECK'D	MP			

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ROUNDABOUT DETAIL SUSSEX INLET RD/GOLFCOURSE WAY
CONCEPT PLAN OF ROUNDABOUT INTERSECTION FROM SUSSEX INLET GOLFCOURSE TO SUSSEX INLET ROAD AT SUSSEX INLET, FOR LUCAS PROPERTY GROUP

REF. No. 24884-108C	REVISION 02
SHEET 1	OF 1 SHEETS

**REPORT PROVIDED TO SHOALHAVEN COUNCIL BY FACILITATOR –
Mirella Di Genua of Tre Sorelle Trading | e - digenua@optusnet.com.au |**

Badgee Concept Roundabout Resident Meetings

*An invitation to a one on one meeting with Council's representatives was offered to residents within 500m radius of the proposed roundabout. This invitation was sent out in early December along with a fact sheet on the updated concept design of the roundabout together with a copy of the revised concept design of the roundabout. The following residents contacted Council indicating that they wished for a one on one meeting. The meetings took place at **Sussex Inlet Community Hall, Thomson Street on the 18 January 2016.***

Attendees: Mirella Di Genua (Independent Facilitator); Dana Alderson (Strategic Planning); Anne McDonald (Strategic Planning); Scott Wells (Traffic & Transport Mgr); Simc Heung (Engineering Coordinator – Development Engineering)

Meeting Schedule: 10-11 [REDACTED]
11.15-12.15 [REDACTED]
12.30-1.30 [REDACTED]
1.45-2.45 [REDACTED]
3-4 [REDACTED].

AGENDA FOR ALL MEETINGS

This meeting agenda, process and Council officers' presentation aimed to be consistent for each meeting with residents. As the meeting facilitator I was responsible for managing the meeting process and ensuring that the residents' key issues and concerns were noted in the minutes (this report). Minutes were taken by Anne McDonald as well as myself and reviewed and summarised by myself into this report. I explained that the notes of these meeting discussions i.e. minutes, would not appear as a direct transcript but reported as a summary of what was said by the residents and the Council officers at each meeting. The meeting with each resident group basically consisted of the following agenda items and information.

Introductions

- ❖ Introductions
- ❖ Overview of role of independent facilitator
- ❖ Overview of process for meeting
- ❖ Agreement on ground rules and process for meeting

Council's Presentation

- ❖ Roundabout determined as the preferred traffic intersection treatment and endorsed by Council.
- ❖ Explanation of changes to the updated roundabout concept and the rationale behind the changes.
- ❖ Overview of development and the essential flood free access.
- ❖ DCP requirements and the next steps. Explanation that the DCP will include what is expected in relation to the detailed design.
- ❖ Anticipated speeds approaching roundabout and at roundabout to be 50-60 kms/hour. Actual point of speed change approaching roundabout is still to be determined. Expectation that this speed limit will be maintained up to Sussex Inlet shopping area.

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- ❖ Anticipated lighting- Council's preferred option is to minimise lights in area and to ensure lighting design is in keeping with other similar intersections/environments and not urban-like; Council will consider compromising on lighting levels to keep lighting consistent, costs at a minimum and not compromising on safety. Council explained that Endeavour Energy owns the lighting assets hence consultation with this stakeholder is also necessary as part of the development of the detailed lighting design of roundabout.
- ❖ Council now seeking the views of residents in relation to the concept roundabout and associated elements including landscaping, vegetation, lighting, adequacy of driveways.

Resident's opportunity to ask questions and present views and concerns

- ❖ This was the residents' opportunity to put forward their views and ideas on the reviewed roundabout concept.

Note – If necessary Council officers would be asked to leave room for 10 minutes and let the resident voice any concerns. This was not required for any of the meetings.

Council's opportunity to make any further comments and agree to any actions

- ❖ What we will take back to Council – reiterate any actions agreed to.
- ❖ Confirm again the DCP process, and the next steps/stages and when they can be involved.

Resident's comments and concerns

- Lived in current property for 32 years, owned for 45 years. [REDACTED] has 9 acres.
- [REDACTED] has 2 driveways into the property and concerned about how the new road will affect his driveways in relation to height differences. One driveway to the east he uses to park a truck in.
- Raised concern with traffic going into Sussex Inlet such as boats and caravans that the roundabout may direct them into the Badgee URA (residential area) and there will be nowhere for them to turn around. A rat run through Badgee would also be created, with roads not able to cope with caravans.
- Generally supportive of the development because he believes that Sussex Inlet needs to grow so that the town has better services and facilities.
- Doesn't have an issue with roundabout's location as doesn't affect him much. However suggested that roundabout should be moved to the south to prevent people being directed into Badgee URA.
- Mentioned that he believed that the original DA approvals along Sussex Inlet Road (including his property) had shared driveway access conditions but this did not happen.
- Concerned about future of golf course and its private ownership. Mentioned that public ownership could be a way to ensure it remains as Sussex Inlet is a retirement area that needed a golf course.
- Noted that other residents of Sussex Inlet were not aware of the roundabout proposal.

Council's response

- Speed zone will be changed, road will be wider, wider sealed shoulders, kerb and guttering, new laybacks into driveways, 2 lanes 2 way – should be easier to get a truck in and out of the property.
- Signage can be put in place to assist road users to know to head straight at roundabout for Sussex Inlet's main centre.
- Roundabout needs to be located in the current vicinity but consultation and further work as part of the detailed design might result in some changes.

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- An adequate turning around spot will be required at the end of the no through road and will be a standard condition of development.

Council's actions/agreements

- Will consider all issues and concerns raised in the development/review of the DCP, however some of the issues raised will need to be considered at the detailed design stage as part of the development assessment process.
- Will propose issue of signage to direct road users to town centre.

Resident's comments and concerns

- Concerned about her loss of amenity – currently very quiet and peaceful at her house and unnecessary removal of vegetation in and around roundabout.
- Concerned about lighting of the roundabout and road being too bright. Mentioned there was a street light on Sussex Inlet Road that used to be on a sensor but no longer was and would prefer this type of lighting
- Concerned about Golfcourse Way being closed and not being able to access her property during roundabout/road construction. Also concerned about car parking arrangements for the golf course during construction.
- Would like to know how much “urbanisation” in terms of kerb and gutter and sealing of Golfcourse Way – road has just been upgraded and is quite good.
- Concerned about parking for golf course users when the new access road is built, and amenity impacts on her property.
- Looking for more planting along her northern boundary to screen out road and would like it in the road reserve. Concerned about width of roads in URA. Asked what the size of the landscape mound would be and what it will look like.
- Concerns that a clearing has taken place in the animal corridor near her property.
- [REDACTED] was concerned about how residents might be informed of the DCP exhibition etc.

Council's response

- Roundabout designed for 60km speed limit for cars and 40-50km/hour for trucks so noise should be reduced. All studies demonstrate noise is less with a roundabout as sound pressure levels are a lot less for slower traffic, for example from 100km to 50km there is a significant reduction in noise despite their being accelerating and braking noise.
- Lighting design cannot be done until roundabout approved, but looking to have one 3 pronged light in the middle and lights at the beginning and end (lead up to roundabout) to minimise the poles around the roundabout for safety reasons. Council mindful of the lighting issue and will note down and address during the detailed design stage. There are minimum lighting requirements but these tend to overdo it. Council keen to keep lighting to minimum for costs to both Council and the Developer, as well as safety.
- Traffic Management plan approved during DA process – resident access retained during construction. Golfcourse way would not be closed off until roundabout fully functional. Unsure of when car parking for golf course is to be relocated to, but would be part of DA. Matters like this will be in

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subdivision approval and the CC will have conditions of consent dealing with such matters so they don't have unnecessary impacts on residents – this will be a consideration down the track.

- Road 01 into new development is likely to about 6m width along the side of the new road. It will need to provide at least 3m for cars to pull off the road and space for in ground utilities. This may limit planting of trees. Also generally Council is reluctant to do tree planting outside of town centres because plants do not get looked after. However Council can look into this at the detailed design stage. Roads will be a similar width to others in Sussex around 16m-20m in width boundary to boundary, actual road probably needs to be about 9m (2 lanes with 2 way).
- The developer was asked to indicate on new concept plan the lines of vegetation removal but this wasn't done. This information will be included on the detailed design.

Council's actions/agreements

- Will consider all issues and concerns raised in the development/review of the DCP, however some of the issues raised will need to be considered at the detailed design stage as part of the development assessment process.
- Will propose issue of signage to direct road users to town centre.
- Council will be happy to lower the lighting levels in area. Will consider a solar power design however assets belong to Endeavour Energy (EE), hence discussions with EE will be required as part of the detailed design.
- Council to propose a number of areas to be considered in developing the detailed design – including lighting; where vegetation is to be removed or planted e.g. road reserve along Road 01; golf course users' parking during construction; stormwater treatment; landscaping.
- Detailed design to show impacts on trees.
- Council to follow up approvals for clearing of land in animal corridor behind [REDACTED] property.
- Council agreed that affected residents would be personally communicated to about DCP exhibition and Council meeting.

Residents' comments and concerns

- Wanted it to be minuted that they do not agree with the roundabout option. Believe that the roundabout is not appropriate to size of development; will increase risks to motorists; will ruin the rural environment and devalue their properties.
- Safety of ingress/egress of their properties is their key concern of the roundabout option. They were seeking examples from Council of similar roundabouts to the proposed roundabout but haven't received this information. The residents believe that there are no other examples of driveways so close to roundabouts. [REDACTED] showed some photos of their driveway in relation to road/proposed roundabout location
- [REDACTED] have lived there for 40 years and have been coming in and out of their driveway without any problems as they can accelerate out. Explained that they can pull off the road 200m to west near [REDACTED] to allow traffic to pass, then pull back on safely and turn into their driveway.
- The current concept design does not allow the [REDACTED] to indicate with enough time or space to get into their driveway. They can't indicate until their off the roundabout and then it only gives them 4

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seconds to indicate into their driveway which they understand as illegal. ██████████ confirmed this information. Concerned insurance wouldn't pay in an accident because when turning into their driveway they would be stopped in no man's land and that would be illegal. Would prefer to have the Sussex Inlet Road alignment straighter through the roundabout.

- Also concerned that the area for their vehicles to park in when waiting to ingress their properties is not large enough for semi-trailer vehicles for deliveries. Believe that Council needs to look at safety of design for the duty of care for all road users especially in relation to the right hand turn into their driveway.

- Suggests a change from 80km to 60km at about 20/30m out from roundabout to slow people down. Concerned that there might be a change in the speed limit to 70km/hour after the roundabout is built

- Read out excerpt from Sussex Inlet Settlement Strategy p72 about Millallen Farmlets and how states further development not considered appropriate in area as mentions additional driveway accesses onto Sussex Inlet Road are a safety risk. These residents believe that this type of driveway roundabout i.e. with driveway accesses on roundabouts, are only common to residential areas where it is 50km speed limit an hour and the minimum safe indication for them to turn into their driveway is 30 seconds. Believe that road users behind their vehicles will be confused on the exit of the roundabout and think they are doing a U-turn when they are going to stop and turn into their driveway.

- Would like roundabout to be moved in location (north-west) closer to Lot 106. Feel that there is still a lot of room within the Council reserve. Also drew on concept plan and showed how Sussex Inlet Road could be made straighter without the deflection that they believe people will not be able to negotiate at the indicated speed.

- Would like to see 1200mm jersey kerb not the 800mm one on concept as it would not screen out larger vehicles including most 4WD headlights.

- Would like Council to consider a type of bitumen that was not noisy. They can hear vehicle stopping and going in and out of Golfcourse Way and thinks therefore roundabout will be noisy at their place as everything echoes generally in Sussex Inlet Road area as nothing to absorb.

- Concerned that Council will be rushed to approve a roundabout they aren't happy with. Also concerned that Council is not favouring Developer's needs over the needs of residents.

- Concerned about stormwater runoff from the new road as they have had several problems with their driveway washing away in past. Concerns that removal of soil and vegetation along road reserve will limit areas for potential drainage and cause greater runoff onto road and across to their properties.

██████████ has filmed the open drain which is located south of the proposed jersey kerb. The water runs off road about 800m to the west then runs under road and into this open drain and in heavy rain it runs over their driveway. Council came and redid their driveway and put in some larger pipes underneath but still have problems with drainage and will have greater problems when roundabout built. ██████████ says 80-90% of stormwater goes into drains across the road in front of their property and that this will increase 4 to 5 times owing to new road resulting in flooding and increase wash away and erosion of their driveway. Soil in area has very thin layer of topsoil then clay and when runs over bare areas erodes very quickly.

- ██████████ has lived in the area for 65 years. ██████████ believes that the Flood Free Access Road (FFAR) should go through the end of Golfcourse Way not through Badgee as the land the FFAR crosses is a wildlife corridor.

- Concerns that the private golf course will be sold off to a developer.

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Council's response

- The design will need to go through legal process which involves the independent traffic committee that RMS and police sit on, which would consider safety aspects as well as other matters. The traffic committee process is separate to Council decision-making process.
- Council has raised issues with developer's engineers for an improved design and greater buffers/widths near their driveway to allow traffic behind to go around them. There is still enough room for the roundabout design to be shifted slightly to allow for a longer stopping point.
- RMS require kerb and guttering for full length of roundabout. Note - Council does not allow kerb and guttering without drainage design as well.
- AC - Asphaltic Concrete - and it is used by Council for all roundabouts. It is a much stronger surface and can be extended up the road if required
- Scott explained that all studies indicate roundabouts have lower noise levels than 100km road as sound pressure levels are lower, despite braking and accelerating noise
- Council can do noise studies before and after the roundabout is installed to confirm noise reduction
- Explained that do not want to over light the roundabout for cost and safety reasons.
- Signage will come after further improvements to the design later down the track – signs and lines plans go through the traffic committee
- FFAR can't go through end of Golfcourse Way because of environmental considerations. OEH has approved provision of FFAR through central E2 area.

Council's actions/agreements

- Will consider all issues and concerns raised in the development/review of the DCP, however some of the issues raised will need to be considered at the detailed design stage as part of the development assessment process.

Explained steps in process from now on and agreed to send information about the DCP process directly by letter.

- Also will send DCP exhibition information to affected residents as well as to the Sussex Inlet Community Forum CCB [REDACTED]
- Will review the video produced by [REDACTED] (if received by Council) on current flooding and drainage issues.
- Concept design currently only accommodates for 12.5m trucks not semi-trailers accessing the [REDACTED] property. Need to follow up owner's requirements and Council's responsibilities to respond to this need.

[REDACTED]

Resident's comments and concerns

- Has an approved subdivision of her allotment [REDACTED] with a driveway at either side of the property for bush fire escape. Would like to know how it will affect her - in relation to the entrance to the property to the north as she is currently getting quotes for doing the road works so she can sell the new lots. However, it may be a waste for them to follow approved plans without knowing where the entrance to their lots will be as a result of the proposed roundabout.
- Would like to get required road works completed sooner rather than later so that she can sell the lots – all three are for sale at present.

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Council's response

- The current concept does not acknowledge her subdivision approval but future revisions and detailed design will need to take this subdivision and its requirements into account.

Council's actions/agreements

- Will make comment to developer regarding a solution to the northern entrance to the property but sees the safest way being entering directly onto/off the roundabout.
- Council acknowledged the resident's want to complete the driveway as soon as possible and will look into the issue and if there is some solution to finishing works 30m before boundary to accommodate future development of roundabout.

Resident's comments and concerns

- Indicated that he did not disagree with the roundabout location but was concerned that it may take more land than required and that its construction would take more vegetation than needed.
- Would like to see the area near his property (near the current entrance to Golfcourse Way) vegetated. Concerns that the proposed landscape mound on the concept plan appears small.
- Concerned that there will be overflow car parking for the golf course patrons in the road way area currently marked for closure on the concept plan. [REDACTED] has recently raised these concerns to Councillor Mark Kitchener.
- Concerns about rubbish dumping in this area as already happens a lot with people leaving club throwing bottles out of the window.
- Concerned about extent of additional lighting as a result of the roundabout. Would like sensor lights to be considered (he believes sensor lights were in place opposite Golfcourse Way). As well, would like a mound along his property boundary with vegetation on it. Otherwise has requested that the developer offers him trees to plant along his side of the boundary for screening.
- Concerns with truck air brakes at roundabout but would like to see the reduction in speed limit because is currently a race track.
- Interested to know amount of vehicle movements on Sussex Inlet Rd now.

Council's response

- Council does regular traffic counts in town and at highway it's about 2000-3000 thousand a day vehicle movements of which 4% are trucks.
- Council can try and ask developer to provide vegetation as a condition of consent.
- Landscape mound on plan only concept at this stage. Council does not know size etc until finer details looked at.
- Lighting plans to be developed within detailed design phase. The aim is to minimise lighting impacts.
- Clarified staging of provision of FFAR – would be gated fire trail style until such time as the eastern part of the release area was developed.

Council's actions/agreements

- Will consider all issues and concerns raised in the development/review of the DCP, however some of the issues raised will need to be considered at the detailed design stage as part of the development assessment process.

Summary of issues raised in relation to roundabout concept design

Issue	Comment	Recommendation
Roundabout will be unsafe due to speed and deflection	<ul style="list-style-type: none"> • AUSTROADS design guide states that roundabouts are the safest form of intersection control as numerous studies show that fewer casualty crashes occur than at other types of intersections as speed levels are lower • The proposed roundabout is designed to require cars to slow to 60km/hr to negotiate the roundabout and trucks to 40-50km/hr • The final roundabout design must be approved by the Traffic Management Committee on which RMS and Police are represented 	<ul style="list-style-type: none"> • No change proposed
Roundabout will cause more traffic noise due to vehicles braking and accelerating to negotiate the roundabout	<ul style="list-style-type: none"> • Studies into sound pressure levels at roundabouts indicate that noise levels at a roundabouts are the same or lower than traffic travelling at 100km/hr (current speed limit in this vicinity) 	<ul style="list-style-type: none"> • No change proposed
Size of roundabout is excessive	<ul style="list-style-type: none"> • Roundabout has been designed in accordance with AUSTROADS design standards and final design will be approved by Traffic Management Committee on which RMS and Police sit • Roundabout size (roundabout plus lanes) has been reduced from 42m to 36m in the current concept plan 	<ul style="list-style-type: none"> • No change proposed
Roundabout needs to be moved to provide safe ingress/egress to properties on the southern side of Sussex Inlet Road	<ul style="list-style-type: none"> • Further work at detailed design stage may result in some changes to the location to ensure safe ingress/egress 	<ul style="list-style-type: none"> • Controls included in the revised draft DCP to require safe ingress/egress is provided to adjoining properties

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<p>Removal of vegetation for construction must be minimised and need for revegetation</p>	<ul style="list-style-type: none"> Extent of clearing required will be determined by need to provide safe sight distances 	<ul style="list-style-type: none"> Controls included in the revised draft DCP to require clearing to be minimised and revegetation and additional planting to be provided
<p>Headlight spill into properties</p>	<ul style="list-style-type: none"> Concept plan proposes measures to minimise headlight spill such as “jersey kerbs” and landscape mounds 	<ul style="list-style-type: none"> Controls included in the revised draft DCP to require the detailed design to incorporate measures to minimise headlight spill
<p>Over lighting of roundabout</p>	<ul style="list-style-type: none"> A detailed lighting plan is not available at this stage, however it will be based on the minimum Australian standards for street lighting 	<ul style="list-style-type: none"> A detailed lighting plan will be required at the DA stage, however Council has a desire to keep lighting to a minimum for safety and ongoing maintenance reasons
<p>It is a road rule to indicate left out of a roundabout and when trying to turn right into 932 Sussex Inlet Road after exiting the proposed roundabout, indicating right will cause confusion as other motorists will think they are turning around</p>	<ul style="list-style-type: none"> NSW Road Rules 2014 – Reg 118 states that when exiting a roundabout drivers must signal left if practical to do so. When travelling straight ahead on a small single lane roundabout such as the one proposed it may be considered impractical to indicate left. 	<ul style="list-style-type: none"> Detailed roundabout design issue - residents will need to be able to turn safely into/out of their driveways
<p>Access to 932 Sussex Inlet Road is still not safe and turning lane does not accommodate semi-trailers for deliveries</p>	<ul style="list-style-type: none"> The AUSTROADS Design Vehicles and Turning Path Templates Guide (http://www.austroads.com.au/images/road-design/AP-G34-13.pdf) does not require that the turning lane accommodate semi-trailers: <i>The design vehicle for a particular case is not necessarily the largest of the vehicles that may operate at that location. The design vehicle is intended to represent the majority of the vehicles allowed to operate at that location. The design vehicles are hypothetical vehicles whose dimensions and operating characteristics are used to establish lane widths and road geometry intersection layouts. A larger vehicle may not be precluded from using the road, but may need to operate with reduced clearances or encroach into</i> 	<ul style="list-style-type: none"> The detailed roundabout design issue - will need to provide a safe turning area for 12.5m rigid vehicles for access to 932 Sussex Inlet Road, consistent with AUSTROADS requirements

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	<i>adjacent lanes. While this may inconvenience some road users, the low frequency of such occurrences makes this acceptable.</i>	
Height differences between new road and existing driveways	<ul style="list-style-type: none"> • A detailed survey and design has not been completed to show height differences between new road and existing driveways 	<ul style="list-style-type: none"> • To be addressed at detailed design stage
Visitor traffic will be inadvertently directed into Badgee URA due to design of roundabout	<ul style="list-style-type: none"> • Concern noted 	<ul style="list-style-type: none"> • A signage plan will be required for the detailed design and directional signage could be incorporated to address this
Provision of adequate turning area in subdivision around golf course for long vehicles	<ul style="list-style-type: none"> • Will be required as standard condition of development consent 	<ul style="list-style-type: none"> • To be addressed at DA stage
Closure of Golfcourse Way and golf course car park, and access to properties during construction	<ul style="list-style-type: none"> • Access and parking arrangements will be maintained during construction and managed through a Traffic Management Plan as part of the development consent 	<ul style="list-style-type: none"> • To be addressed at DA stage
Object to proposed use of closed section of Golfcourse Way for overflow golf club parking due to existing issues with rubbish from club visitors along this stretch of road	<ul style="list-style-type: none"> • Concern noted. It is proposed that the closed section of Golfcourse Way be revegetated 	<ul style="list-style-type: none"> • Controls included in the revised draft DCP to require revegetation
Concerns about not being informed of DCP exhibition	<ul style="list-style-type: none"> • Concern noted 	<ul style="list-style-type: none"> • Council will again send exhibition information to previous submitters, affected residents and relevant community organisations
Provision of additional vegetation and details of mounds to screen properties	<ul style="list-style-type: none"> • A landscape plan is not available at this stage but will be prepared as part of the DA 	<ul style="list-style-type: none"> • Controls included in the revised draft DCP require the detailed landscaping design to incorporate measures to minimise headlight spill and that additional planting be provided where possible (subject to location of services and road safety considerations)
Jersey kerb screen should be at least 1200mm (not 800m) o screen headlights	<ul style="list-style-type: none"> • Concern noted 	<ul style="list-style-type: none"> • Controls included in the revised draft DCP require the detailed design to incorporate measures to minimise headlight spill

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Bitumen should be low noise type	<ul style="list-style-type: none"> Asphaltic Concrete (low noise) is used on all roundabouts in City and will be used here 	<ul style="list-style-type: none"> To be addressed at DA stage
Increased stormwater runoff	<ul style="list-style-type: none"> Concern noted 	<ul style="list-style-type: none"> Roundabout to have kerb and guttering and a drainage plan that addresses stormwater runoff will be approved as part of DA
Flood Free Access Road (FFAR) should go through end of Golfcourse Way not subdivision because of wildlife corridor	<ul style="list-style-type: none"> The FFAR cannot go through Golfcourse Way because of environmental considerations related to Badgee Lagoon (SEPP 14 wetland) and also flood free access would not be available. The Office of Environment and Heritage were consulted in determining the route for the FFAR. 	<ul style="list-style-type: none"> No change provided
Driveway location of adjoining approved subdivision SF10392 has not been taken into consideration	<ul style="list-style-type: none"> Concern noted 	<ul style="list-style-type: none"> Detailed design of roundabout to provide driveway access to match in with approved subdivision SF10392
Clarification needed on staging of FFAR	<ul style="list-style-type: none"> A temporary gated FFAR (similar to a fire trail) will be provided at the first stage of subdivision. The temporary FFAR is proposed to be gated and is only to be used in emergencies. The final FFAR will be required once development commences in the Eastern Precinct. The final FFAR will be open at all times and will enable traffic from the Badgee area to travel through the URA to Sussex Inlet Road. 	<ul style="list-style-type: none"> The revised draft DCP has requirements that cover: <ul style="list-style-type: none"> Staging of the FFAR; Construction standards and maintenance; and Management arrangements to facilitate access to the temporary FFAR in case of emergency.