



WYONG SHIRE COUNCIL

WYONG SHIRE COUNCIL
ORDINARY MEETING
ENCLOSURES

Wednesday, 14 October, 2009



WYONG SHIRE COUNCIL
ENCLOSURES TO THE
ORDINARY MEETING
TO BE HELD IN THE COUNCIL CHAMBER,
WYONG CIVIC CENTRE, HELY STREET, WYONG
ON WEDNESDAY, 14 OCTOBER 2009 ,
COMMENCING AT 5:00:00 PM

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K1 KEEPING OF ANIMALS

Department:	Shire Planning
Unit:	Planning – Legal & Policy
File:	2009/00055
Adopted on:	Revision Required by:

POLICY OBJECTIVES

- 1 To inform the community of the statutory restrictions and acceptable limits which apply to the keeping of certain animals for domestic purposes.
- 2 To give guidance and advice to persons inquiring as to the keeping of animals for domestic purposes.
- 3 To establish standards, acceptable to the community, for the keeping of animals.
- 4 To publicly notify the circumstances that the Council will consider in determining whether to serve an Order under Section 124 of the Local Government Act, 1993 to prohibit, restrict or in some other way, require things to be done regarding the keeping of animals.
- 5 To identify which animals are prohibited within Wyong Shire and the circumstances in which such animals are prohibited

PREAMBLE

This policy seeks to inform the Wyong community of Council's regulatory powers concerning the keeping of animals in the urban environment. The Policy aims to:

- a Minimise the incidence of nuisance being caused to persons;
- b Protect the welfare of companion and farm animals;
- c Protect the welfare and habitat of wildlife; and
- d Minimise the disturbance of or damage to protected vegetation.

It is well documented that the keeping of companion animals and/or pet animals can be most beneficial to the well-being of people. Nevertheless, on occasions, complaints are made to Council where animals of an inappropriate species or number are being kept or where the animals and their accommodation are not being cared for properly.

It is not intended within this policy to regulate the manner in which animals should be kept. It is however necessary that this policy should inform the reasonable limits (both statutory and advisory) which apply concerning the maximum number of animals and the circumstances under which they may be kept on premises.

Responsible ownership is a very important component of nuisance control and this document also contains advice to the animal owner regarding their responsibilities to prevent a nuisance from occurring.

SCOPE

This policy applies to animals kept for domestic purposes, as companion animals, pets or for hobby interests.

The principles contained in the prescriptive requirements will also apply to the keeping of animals for commercial purposes, including boarding, breeding, grooming, caring, treatment, training, racing, exhibiting, trading or selling.

However, where it is intended to keep animals for any commercial purposes, it is necessary that a development application be submitted to Council and planning consent be obtained. Consent to the operation of animal establishments may not be permitted where Council considers that the proposal would be detrimental to the amenity of the locality.

RELATED LEGISLATION

COUNCIL'S POWER TO CONTROL AND REGULATE THE KEEPING OF ANIMALS

Generally, Council's powers to control and regulate the keeping of animals are provided under Section 124 of the Local Government Act, 1993 and the Local Government (General) Regulation, 2005.

The Council may, in the appropriate circumstances, issue an Order to:

- * prohibit the keeping of various kinds of animals;
- * restrict the number of various kinds of animals to be kept at a premises;
- * require that animals be kept in a specific manner.

The Council may also issue Orders requiring:

- * demolition of animal shelters built without the prior approval of Council;
- * the occupier to do or refrain from doing such things as are specified so as to ensure that land or premises are placed or kept in a safe or healthy condition.

It is advised that Council can exercise further controls over animals under the following Acts:

- * Protection of the Environment Operations Act 1997
- * The Impounding Act, 1993
- * Companion Animals Act 1998

GIVING OF ORDERS BY COUNCIL

Generally, where a problem is identified with the keeping of animals and it can not be resolved by consultation, the Council will proceed to issue a notice of intention to serve an Order. Normally a person will be given opportunity to make representation to Council prior to a formal Order being issued. In situations where urgency is required, an emergency Order may be issued without prior notice.

POLICY REQUIREMENTS

The number of animals that may be kept at a premise should not exceed the number prescribed as appropriate to the kind of animal listed in the table included with this policy.

The kind of animal that is suitable to be kept at any premises will be determined having regard for the size of the available yard area and the distance to the nearest dwelling or other prescribed building. Certain statutory requirements also apply as noted in the table.

It should not be assumed that animals of all kinds may be kept on premises that are part of a multiple dwelling development. Where a dwelling is owned within a Strata Plan, it will be necessary for the rules of the Body Corporate to be examined for requirements relevant to the keeping of animals.

Animals should be kept in a manner which does not:

- * Create unclean or unhealthy conditions for people or for the animals.
- * Attract or provide a harbourage for vermin.
- * Create offensive noise or odours.
- * Cause a drainage nuisance or dust nuisance.
- * Create waste disposal problems or pollution problems.
- * Create an unreasonable annoyance to neighbouring residents or fear for safety.
- * Cause nuisance due to proliferation of flies, lice, fleas or other insects.

Animals should not be kept at premises used for the manufacture, preparation, sale or storage of food for human consumption.

Suitable shelter(s) should be provided for all animals. Certain species of animals are required to be kept in cages to prevent escape or attack by predators. Generally, other animals are to be securely enclosed with adequate fencing to prevent escape.

Certain animal shelters and facilities should not be erected or located at a premise without the prior approval of Council. Animal owners wishing to erect such structures should consult 'DCP 2005: Chapter 85- Exempt Development' to determine which structures require development approval.

RESIDENTIAL LAND

Residential land referred to under this policy includes land that is located within the 2(a), 2(b), 2(c), 2(d) and 2(e) zones, or any other land that is used for residential purposes, and has an area less than 1200m². Residential land with an area greater than 1200m² may be considered as rural under the provisions of this policy only.

VARIATION TO THIS POLICY

Variations to this policy may be sought, by the occupier of the land, by making written representation to Wyong Shire Council. Any proposal for a variation to this policy will be considered on a case-by-case basis and must provide the following information as a minimum:

- The size of the property;
- A site plan showing the location where the animals will be kept and the distance from any structures on site or on adjoining properties;
- The type of animals to be kept;
- The number of animals to be kept;
- Owners consent from the owner of the property;

- The likely impact of the animals on the environment and the amenity of the area;
- Information addressing any matters raised by Council in any correspondence.

Written support from neighbouring properties will be beneficial in supporting your case for a variation.

TABLE OF REQUIREMENTS

The following table indicates the essential requirements and relevant considerations regarding the keeping of animals.

ANIMAL SPECIES	MAXIMUM NUMBER PERMITTED	MINIMUM DISTANCE (from certain buildings, including; dwellings, public halls, schools, hospitals or premises used for the manufacture, preparation, sale or storage of food)	APPLICABLE REGULATIONS AND OTHER ADVISORY MATTERS
Poultry, domestic and guinea fowl	10	10 metres from a dwelling on the same site and 15m from any other building	<p>Keeping of poultry must not create a nuisance or be dangerous or injurious to health. Poultry yards must at all times be kept clean and free from offensive odours. Council may, insist on the keeping of domestic poultry or guinea fowl at a greater distance than 10 metres in particular cases.</p> <p>Poultry yards must be enclosed to prevent escape of poultry.</p> <p>Yards must be kept free of rats and mice.</p> <p>The base of poultry enclosures must be paved with concrete or mineral asphalt unless situated on clean sand.</p>
Poultry, other than fowls, including, peafowl and other pheasants	10	30 metres	
Geese and turkeys	2	30 metres	
	Roosters are not permitted in residential areas.		
Pigeons	<p>60 pairs – Registered racing pigeon owners</p> <p>10 pairs – Non registered owners</p> <p>Keeping of pigeons is not permitted in medium and high density residential developments</p>	9 metres	Compliance with the Code of Conduct for the Keeping of Pigeons (Attachment 1, Appendix 1).

ANIMAL SPECIES	MAXIMUM NUMBER	MINIMUM DISTANCE (from certain buildings)	APPLICABLE REGULATIONS AND OTHER ADVISORY MATTERS
Birds including canaries, budgerigars, quails, finches and parrots	Appropriate to location and breed	Appropriate distance to avoid nuisance to adjoining premises	Compliance with the Code of Conduct for the Keeping of Birds, including canaries, budgerigars, quails, finches and parrots. (Attachment 1, Appendix 2).
Cockatoos	1	Appropriate distance to avoid nuisance to adjoining premises	Cockatoos are generally not appropriate as domestic pets as they often present a significant noise nuisance.
Rabbits	Appropriate to location and breed. Care should be taken to prevent excessive breeding.	3 metres	Must be domestic breed and kept in a cage. Must not be released into the environment. It is illegal to administer the fibroma (myxomatosis) vaccine in rabbits.
Ferrets	-	Appropriate distance to avoid nuisance to adjoining premises	The keeping of ferrets is not recommended; however, where proper care (including appropriate secure cages) is available, the keeping of ferrets may be undertaken provided no nuisance is created. Cages should be adequate to prevent escape.
Reptiles	As appropriate in the circumstances with the appropriate licences.	Appropriate distance to avoid nuisance to adjoining premises	National Parks and Wildlife Act, 1974 requires a Reptile Keeper's Licence to be held for anyone who keeps captive-bred reptiles. It is against the law to take reptiles from the wild. Advice on the keeping of reptiles should be sought from the National Parks and Wildlife Service in all cases. All species must be adequately housed to prevent escape. The keeping of snakes may cause concern to neighbours.
Pet rats, mice and guinea pigs	4 of each variety	3 metres	Rats and mice are to be kept indoors only in appropriate cages which are to be kept odour free. Care should be taken to prevent excessive breeding and release into the environment.

ANIMAL SPECIES	MAXIMUM NUMBER	MINIMUM DISTANCE (from certain buildings)	APPLICABLE REGULATIONS AND OTHER ADVISORY MATTERS
Dogs	Residential properties: Dogs in excess of 25 kilograms – maximum of 2 dogs Dogs between 11 and 25 kilograms – maximum of 3 dogs Dogs less than 11 kilograms – maximum of 4 dogs Units and Townhouses: maximum 1 dog with the written permission of the body corporate Rural properties:- As appropriate to size of property.	Appropriate distance to avoid nuisance to adjoining premises	<p>Dogs should be kept in numbers and breeds appropriate to the size of the property.</p> <p>Dog owners must be responsible for ensuring that yards are kept in a healthy condition and faeces is suitably disposed of when exercising dogs in public areas.</p> <p>Owners should remain aware of any noise nuisance created by barking dogs as they are subject to noise restrictions under Protection of the Environment Operations Act 1997.</p> <p>The Companion Animals Act 1998 requires that dogs must be registered from 6 months of age and must wear a collar with a name tag displaying the dogs name and the address and/or phone number of the owner. They must also be microchipped from 12 weeks of age.</p>
Cats	3	Appropriate distance to avoid nuisance to adjoining premises	<p>Cats should be kept in numbers and breeds appropriate to the size of the property and should be kept indoors at night.</p> <p>Cats should wear collars with a tag displaying their name and owners address and/or phone number with a bell attached.</p> <p>Trees in properties housing cats should have chicken wire wrapped around the trunk 1.5m from the ground with the top 200mm bent outwards to protect native wildlife.</p> <p>The Companion Animals Act 1998 requires that cats must be registered from 6 months of age and must wear a collar with a name tag displaying the dogs name and the address and/or phone number of the owner. They must also be microchipped from 12 weeks of age unless born before 1 July 1999.</p>

ANIMAL SPECIES	MAXIMUM NUMBER	MINIMUM DISTANCE (from certain buildings)	APPLICABLE REGULATIONS AND OTHER ADVISORY MATTERS
Sheep and Goats	Residential premises- 1 Rural properties- As appropriate to size of property.	10 metres	Goats and rams are not permitted to be kept on residential properties. These animals are not to be slaughtered at the properties where they are kept. Consideration should be given to any noise created by sheep as they are subject to noise restrictions under Protection of the Environment Operations Act 1997.
Pigs	Rural Properties – 1 Not permitted in suburban areas	Pigs or their manure must not be within 60 metres of certain buildings	Local Government (General) Regulation, 2005 applies to pigs. The keeping of pigs is not permitted in residential areas. This applies to all breeds of pigs, including miniature pigs.
Horses and Cattle	Rural properties - As appropriate to size of property Not permitted in Residential areas	10 metres	Local Government (General) Regulation, 2005 applies. A greater separation distance may be required by resolution of Council in each particular case. Fencing must be strong and durable to prevent escape. Stables and sheds must be hard paved and graded to drain. The keeping of horses and cattle on residential properties is not permitted.
Bees	Maximum 2 hives in suburban areas Rural Properties – As appropriate to the size of property	Hives should not be located within the vicinity of schools, childcare centres, hospitals or other public facilities.	Regulated by the NSW Apiaries Act 1985. Beekeepers must be registered in NSW and applications are available from the NSW Department of Primary Industries (DPI). Beekeepers should refer to the Beekeeping Code of Practice on the NSW DPI website. Bee flight paths to and from the hive should be kept distant from outdoor areas frequently used by people. Screens may be necessary to raise flight paths. An ample supply of water near the hive is required in summer months.

NOTES:

- A The distances indicated in the third column of the above table are to be measured in metres from the animal yard or enclosure to the nearest dwelling, public hall, school, hospital, premises used for the manufacture, preparation, sale or storage of food or any other building listed.
- B Animal includes a mammal, bird, reptile, amphibian or fish. It does not include a human being (as defined by the Prevention of Cruelty to Animals Act).
- C The distance specified above may be varied by resolution of the Council and notified in writing to the occupier of the premises in specific cases.

Animals Prohibited within the Residential Area

The following animals are not permitted to be kept in residential areas due to the likely impacts on health and amenity;

- Roosters;
- Goats;
- Rams;
- Horses;
- Cattle; and
- Pigs.

CODE OF CONDUCT FOR THE KEEPING OF BIRDS, INCLUDING CANARIES, BUDGERIGARS, QUAILS, FINCHES AND PARROTS WITHIN WYONG SHIRE

The Code of Conduct for the practice of aviculture, the keeping and breeding of birds, identifies criteria for Council to take into account in determining application for the building and operation of an aviary or associated structure.

The aim of the criteria is to provide clear guidelines in relation to the care, control and management of birds, so as to ensure the activity of aviculture does not create any nuisance including health or environmental problems.

The Code of Conduct does not incorporate poultry, fowl, sulphur crested cockatoo or long billed corella. A separate Code of Conduct has been formulated for the keeping of pigeons.

GENERAL REQUIREMENTS

- a Prior to the construction of an aviary or associated structure for the keeping and/or breeding of birds, a development application must be submitted to Council for consideration. An application is exempt in certain circumstances where the maximum area is ten square metres and the maximum height is 2.7 metres, with a minimum setback of 900mm from property boundaries. To ensure that the development is permitted as exempt development without an application the provisions of DCP 2005: Chapter 85 – Exempt Development must be complied with.
- b Plans and specification accompanying the submission of a development application must show details of ventilation and waterproofing of the aviary. Individual bird species require accommodation appropriate to their needs, including:
 - i protection from the extremes of climate;
 - ii safety from predators;
 - iii exposure to a suitable light source;
 - iv ample fresh air.

Conditions

- a All birds are to be kept in accordance with the NSW Animal Welfare Code of Practice No 4 – Keeping and Trading of Birds prepared by the Department of Primary Industries as well as comply with the provisions outlined in this policy.
- b The aviary or site works indicated on the submitted plans or required under the terms of any consent must be completed to Council's satisfaction prior to occupation.

- c All roof and concentrated surface waters are to be collected and disposed of into an approved drainage system to Council's satisfaction. Note: Full details of drainage are to be submitted with the development application.
- d The aviary or associated structure is to be constructed in a workmanlike manner to Council's satisfaction. External cladding materials are to be finished in an unobtrusive colour, so as to blend in with the surrounding environment.
- e The flooring of the aviary or associated structure is to be rodent proof, i.e. hard stand base.

Health and Environmental Conditions

- a No interference with the amenity of the area by reason of the emission of unreasonable noise, smell, feathers or otherwise is to be the result of the keeping and/or breeding of birds.
- b The aviary and its use must not create any offensive noise, within the meaning of the Protection of the Environment Operations Act 1997. Soundproofing measures may be required, depending upon the noise potential, due to the numbers of birds, species type, aviary location and surrounding environment.
- c Aviaries and cages are to be kept clean and free of offensive odours at all times. Aviary management requires removal of waste food daily and the removal of excess build up of faeces weekly. Smaller aviaries or cages require daily cleaning, daily to weekly removal of cage floor substrate and immediate removal of wet material.
- d No feathers or droppings are permitted to escape from the subject land. Waste is to be regularly collected and disposed of.
- e Waste water associated with the cleaning of the aviary should be disposed of to the sewer in accordance with Council regulations.
- f All food is to be stored in sealed vermin proof containers. Any spillage is to be collected and disposed of or returned to the storage containers. Note: Details of storage containers and location should be submitted to Council with the development application.
- g Vermin and other pests should be rigidly controlled to prevent entry to cages, aviaries or food storage areas. If vermin is observed, prompt action should be taken to eradicate them.

Bird Keeping and Breeding Management Advice

Correct management practices are essential for the welfare of the birds and ensuring that the surrounding amenity and adjoining property owners are not adversely affected. Expert information on best keeping practices and the appropriate caring and housing facilities for birds is available from the Department of Primary Industries, Budgerigar Society of New South Wales, or an appropriate bird society.

Native Birds

Separate to Council Policy the keeping of native birds requires the holding of an Animal Keepers Licence which can be obtained from the National Parks and Wildlife Service. Exemptions include budgerigar, zebra finch, galah and sulphur crested cockatoo.

Policy Variation

Provisions exist under the Local Government Act 1993 to restrict bird numbers whereby Council is of the opinion that they are kept in inappropriate numbers, manner or kind.

CODE OF CONDUCT FOR THE KEEPING OF PIGEONS WITHIN WYONG SHIRE

OBJECTIVE

The Code of Conduct for the keeping of pigeons identifies criteria for Council to take into account in determining application for the building and operation of a loft or other structure for a pigeon/s.

The aim of the criteria is to provide clear guidelines to assist persons keeping pigeons, so as to ensure that the activity does not create any health or environmental problems.

REQUIREMENTS

- a Prior to the construction of a pigeon loft, for the keeping of racing or show pigeons, a development application must be submitted to Council for approval.
- b Plans and specifications accompanying the submission of a development application must show details of ventilation and waterproofing of the loft. (The loft must be positioned to obtain the maximum sunlight and ventilation).
- c The maximum number of pigeons that may be kept on any premises is outlined in the table within this policy.

It should be noted that in residential areas where the minimum distance only is observed to neighbouring residences, the number of birds permitted may be reduced.

- d The minimum distance a loft may be erected from any residence or certain buildings is 9 metres.

NOTE: The Pigeon Fanciers Association will assist Council in resolving disputes between pigeon keepers and aggrieved parties, where considered appropriate.

Conditions

- a The loft or site works indicated on the submitted plans or required under the terms of any consent shall be completed to Council's satisfaction prior to occupation.
- b All roof and concentrated surface water are to be collected and disposed of into an approved drainage system to Council's satisfaction. Note:- Full details of drainage are to be submitted with the development application.
- c The loft is to be constructed in a workmanlike manner to Council's satisfaction. External cladding materials are to be finished in an unobtrusive colour, so as to blend in with the surrounding environment.

Health and Environmental Conditions

- a No interference with the amenity of the area by reason of the emission of unreasonable noise, smell, feathers or otherwise is to be the result of the keeping of pigeons.
- b Pigeons are not to be released or exercised during the hours of 8.00am and 4.00pm of any day of the week, except during the one hour period before dusk during winter.

- c Any pigeon released from the loft must not be fed within the ten hour period prior to that release, for the purpose of reducing the natural inclination for the pigeons to defecate while in flight.
- d The free lofting of pigeons is not permitted. (Practice of leaving loft doors or gates open to allow the pigeons access to and from the loft or locking the pigeons out of the loft).
- e The pigeon loft and its use must not create any offensive noise, within the meaning of the Protection of the Environment Operations Act 1997 or substantiating legislation. Light control, such as through the use of shades or blinds may be required in the early morning to restrict noise.
- f The pigeon loft and associated areas are to be kept clean and free of offensive odours at all times and action taken to minimise the emission of dust from the loft area. Minimum cleaning of loft is to be undertaken one per week and the floor and perches are to be sprayed with an appropriate insecticide on a regular basis.
- g No pigeon feathers or droppings are permitted to escape from the subject land. Waste is to be regularly collected and disposed of by the keepers of pigeons.
- h Waste water associated with the cleaning of the loft should be disposed of to the sewer in accordance with Council regulations.
- i All food is to be stored in sealed vermin proof containers. Any spillage is to be collected and disposed of or returned to the storage containers. Note:- Details of storage containers and location should be submitted to Council with the building application.

Policy Variation

Provisions exist under the Local Government Act 1993 to restrict bird numbers where Council is of the opinion that they are kept in inappropriate numbers, manner or kind.

LEGISLATION: LOCAL GOVERNMENT ACT 1993 - SECTION 124, PROTECTION OF THE ENVIRONMENT OPERATIONS ACT 1997, COMPANION ANIMALS ACT 1998

DEPARTMENT: Shire Planning

P PLANNING AGREEMENTS POLICY

Department:	Shire Planning
Unit:	Future Planning
Responsible Officer:	Senior Contributions Officer
Review Details:	To be reviewed within 12 months of adoption
File:	F2004/00552
Adopted on:	Amended on:

1.0 INTRODUCTION

1.1 This Policy sets out Wyong Shire Council's policy, principles and procedures relating to the use of Planning Agreements under the Environmental Planning and Assessment Act 1979.

1.2 This Policy was adopted by resolution of Council on and became effective on

1.3 This Policy applies to land and Development within the local government area of Wyong Shire Council.

1.4 In this Policy, the following terminology is used:

Act means the Environmental Planning and Assessment Act 1979.

Contributions Plan means a contributions plan approved under Section 94EA of the Act for the purpose of requiring contributions under Section 94 or 94A of the Act.

Council means Wyong Shire Council.

Developer, Developers has the same meaning given in Section 93F(1) of the Act.

Development has the same meaning given in Section 4 of Part 1 of the Act.

Development Contribution means the kind of provision made by a developer under a Planning Agreement, being a monetary contribution, the dedication of land free of cost or the provision of a material Public benefit.

Instrument change means a change to an environmental planning instrument to enable a development application to be made to carry out development the subject of a Planning Agreement.

Net public benefit is a benefit that exceeds the benefit derived from measures that would address the impacts of particular development on surrounding land or the wider community.

Parties means Council and a Developer or Developers.

Planning Agreement means a voluntary agreement or other arrangement between Council and a Developer authorised by Subdivision 2 of Division 6 of Part 4 of the Act and includes an agreement to amend or revoke a Planning Agreement.

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Planning benefit means a Development Contribution that confers a Net public benefit.

Public includes a section of the public.

Public benefit is the benefit enjoyed by the public as a consequence of a development contribution.

Public facilities means public infrastructure, facilities, amenities and services.

Public purpose means any purpose that benefits the public, including but not limited to a purpose specified in Section 93F(2) of the Act.

Regulation means the Environmental Planning and Assessment Regulation 2000.

Surplus value means the value of the Developer's provision under a Planning Agreement less the sum of the value of public works required to be carried out by the Developer under a condition imposed under Section 80A(1) of the Act and the value of development contributions that are or could have been required to be made under Section 94 or Section 94A of the Act in respect of the development the subject of the agreement.

- 1.5 The purposes of this Policy are:
- (a) To establish a framework governing the use of Planning Agreements by Council;
 - (b) To ensure that the framework so established is efficient, fair, transparent and accountable;
 - (c) To enhance planning flexibility in Council's area through the use of Planning Agreements;
 - (d) To enhance the range and extent of development contributions made by development towards Public facilities in Council's area;
 - (e) To set out Council's specific policies on the use of Planning Agreements; and
 - (f) To set out procedures relating to the use of Planning Agreements within Council's area.
- 1.6 Council's Planning Agreements framework consists of the following:
- (a) The provisions of Subdivision 2 of Division 6 of Part 4 of the Act;
 - (b) The provisions of Division 1A of Part 4 of the Regulation; and
 - (c) This Policy.
- 1.7 This Policy is not legally binding. However, it is intended that Council and all persons dealing with Council in relation to Planning Agreements will follow this Policy to the fullest extent possible.
- 1.8 It is intended that this Policy will be periodically reviewed and, depending on the outcome of any review, may be updated from time to time. The updates may cover additional matters to those covered in this Policy or provide more detailed information or guidance on specific matters covered in this Policy.

2.0 POLICY ON THE USE OF PLANNING AGREEMENTS

This section sets out the policy and framework relating to the use of Planning Agreements.

Objectives

- 2.1 Council's objectives with respect to the use of Planning Agreements include:
- (a) To provide an enhanced and more flexible development contributions system for Council, which achieves net Planning benefits from Development;
 - (b) To supplement or replace, as appropriate, the application of Section 94 and Section 94A of the Act to Development;
 - (c) To give all stakeholders in Development greater involvement in determining the type, standard and location of Public facilities and other Public benefits;
 - (d) To allow the community, through the public participation process under the Act, to gain an understanding as to the redistribution of the costs and benefits of Development in order to realise community preferences for the provision of Public benefits;
 - (e) To adopt innovative and flexible approaches to the provision of Public facilities in a manner that is consistent with relevant controls, policies and circumstances legally recognised as relevant under Section 79C of the Act;
 - (f) To provide or upgrade Public facilities to appropriate levels that reflect and balance environmental standards (including, without limitation, the principles of ecologically sustainable development), community expectations and funding priorities;
 - (g) To ensure that Developers make appropriate contributions towards the cost of the provision and management of Public facilities within Council's area;
 - (h) To provide certainty for the community, Developers and Council in respect to Public facilities and development outcomes; and
 - (i) Where applicable, to achieve outcomes from Development which ensure that the public has full access to the Shire's natural public assets including the Tuggerah Lakes foreshore and other waterways within Council's area.

Principles

- 2.2 Council's use of Planning Agreements will be governed by the following principles:
- (a) Planning decisions may not be bought or sold through Planning Agreements;
 - (b) Development that is unacceptable on planning grounds (including, without limitation, environmental, sustainability or financial grounds) will not be permitted because of Planning benefits offered by Developers that do not make the Development acceptable in planning terms;
 - (c) Council will not allow Planning Agreements to improperly fetter the exercise of its functions under the Act, Regulation or any other Act or Law.

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- (d) Council will not use Planning Agreements for any purpose other than a proper planning purpose.
- (e) Council will not allow the interests of individuals or interest groups to outweigh the public interest when considering a proposed Planning Agreement;
- (f) Council will not improperly rely on its statutory position, or otherwise act improperly, in order to extract unreasonable Public benefits from Developers under Planning Agreements, and will ensure that all Parties involved in the Planning Agreement process are dealt with fairly; and
- (g) If Council has a commercial stake in Development the subject of a Planning Agreement, it will take appropriate steps to ensure that it avoids a conflict of interest between its role as a planning authority and its interest in the Development.

Circumstances in which Council will consider Negotiating a Planning Agreement

- 2.3 Council, in its complete discretion, may negotiate a Planning Agreement with a Developer in connection with any application by the Developer for an Instrument change or for development consent relating to any Development of land in Council's area.

Specific Purposes of Planning Agreements

- 2.4 Council may consider negotiating a Planning Agreement with a Developer to:
- (a) Compensate for the loss of, or damage to, a public amenity, service, resource or asset caused by the Development through its replacement, substitution, repair or regeneration;
 - (b) Meet the demands created by the Development for new Public facilities;
 - (c) Achieve the provision of affordable housing;
 - (d) Address a deficiency in the existing provision of Public facilities in Council's area;
 - (e) Achieve recurrent funding in respect of Public facilities;
 - (f) Prescribe inclusions in the Development that meet specific planning objectives of Council;
 - (g) Monitor the implementation of Development;
 - (h) Ensure that public access to the Shire's natural public assets, including the Tuggerah Lakes foreshore and other waterways within Council's area, is preserved or enhanced;
 - (i) Secure Planning benefits for the public; and

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- (j) Allow the payment of monetary contributions at various stages of Development which may differ to that specified in an adopted Contributions Plan, pending careful consideration of Public facility delivery and associated financial implications.

Acceptability Test to be Applied to All Planning Agreements

2.5 Council will apply the following test in order to assess the acceptability of a proposed Planning Agreement:

- (a) Is the proposed Planning Agreement directed towards a proper or legitimate planning purpose having regard to its statutory planning controls and other adopted planning policies and strategies and the circumstances of the case?
- (b) Does the proposed Planning Agreement provide for a reasonable means of achieving the relevant purpose and outcomes and securing the benefits?
- (c) Can the proposed Planning Agreement be taken into consideration in the assessment of the relevant Instrument change or application for Development?
- (d) Will the proposed Planning Agreement produce outcomes that meet the general values and expectations of the public and protect the overall public interest against planning harm?
- (e) Does the proposed Planning Agreement promote Council's objectives in relation to the use of Planning Agreements as set out in this Policy?
- (f) Does the proposed Planning Agreement conform to the principles governing Council's use of Planning Agreements as set out in this Policy?
- (g) Are there any relevant circumstances that may operate to preclude Council from entering into the proposed Planning Agreement?

Consideration of Planning Agreements in relation to Instrument Changes and Applications for Development

2.6 When exercising its functions under the Act in relation to an application by a Developer for an Instrument change or a development consent to which a proposed Planning Agreement relates, Council will consider to the fullest extent permitted by law:

- (a) Whether the proposed Planning Agreement is relevant to the application and hence may be considered in connection with the application; and
- (b) If so, the proper planning weight to be given to the proposed Planning Agreement.

Application of Section 94 and Section 94A to Development to which a Planning Agreement Relates

2.7 Council has no general policy on whether a Planning Agreement should exclude the application of Section 94 or Section 94A of the Act to Development to which the agreement relates. This is a matter for negotiation between Council and a Developer having regard to the particular circumstances of the case.

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- 2.8 However, where the application of Section 94 or Section 94A of the Act to Development is not excluded by a Planning Agreement, Council will generally not agree to a provision allowing benefits under the agreement to be taken into consideration in determining Development Contributions under Section 94 or Section 94A of the Act.

Form of Development Contributions under a Planning Agreement

- 2.9 The form of a Development Contribution to be made under a proposed Planning Agreement will be determined by the particulars of the Instrument change or application for Development to which the proposed Planning Agreement relates. Without limitation, Development Contributions by a Developer under a proposed Planning Agreement may include:
- (a) The dedication of land to Council or another relevant Public authority;
 - (b) The provision of particular Public facilities;
 - (c) The making of a monetary contribution towards the cost of the provision of Public facilities; or
 - (d) The provision of, or payment towards, recurrent services in respect of Public facilities.

Recurrent Charges

- 2.10 Council may request Developers, through a Planning Agreement, to make Development Contributions towards the recurrent costs of Public facilities. Where the Public facility primarily serves the Development to which the Planning Agreement relates or neighbouring Development, the arrangement for recurrent funding may be in perpetuity.
- 2.11 However, where the Public facility or Public benefit is intended to serve the wider community, the Planning Agreement will only require the Developer to make contributions towards the recurrent costs of the Public facility until a public revenue stream is established to support the ongoing costs of the facility.

Pooling of Monetary Contributions

- 2.12 Where a proposed Planning Agreement provides for a monetary contribution by the Developer, Council may seek to include a provision permitting money paid under the agreement to be pooled with money paid under other Planning Agreements or Contributions Plans and applied progressively for the different purposes under those agreements or plans, subject to the specific requirements of the relevant agreements or plans. Pooling may be appropriate to allow Public facilities that provide Public benefit, to be provided in a fair and equitable way.

Methodology for Valuing Public Benefits under a Planning Agreement

- 2.13 Unless otherwise agreed in a particular case, where the benefit under a Planning Agreement is the provision of land for a Public purpose, the value of the benefit will be determined by an independent valuer with at least 10 years experience in valuing land in New South Wales (and who is acceptable to Council), on the basis of a scope of work which is prepared by Council. All costs of the independent valuer in carrying out such a valuation will be borne by the Developer.

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- 2.14 Unless otherwise agreed in a particular case, where the benefit under a Planning Agreement is the carrying out of works for a Public purpose, the value of the benefit will be determined by an independent quantity surveyor with at least 10 years experience (and who is acceptable to Council), on the basis of the estimated value of the completed works determined using the method that would be ordinarily adopted by a quantity surveyor.
Council will prepare the scope of work for this independent quantity surveyor. All costs of the independent quantity surveyor in carrying out this work will be borne by the Developer.
- 2.15 Where the benefit under a Planning Agreement is the provision of a material Public benefit, Council and the Developer will negotiate the manner in which the benefit is to be valued for the purposes of the agreement.

Credits

- 2.16 Council will not allow the Surplus value under a Planning Agreement to be offset against Development Contributions required to be made by the Developer in respect of other Development outside of the area of the applicable Contributions Plan.
- 2.17 Unless otherwise agreed by the Parties in a particular case, The Surplus value will not be refunded to a Developer until the following criteria are met:
- (a) All of the Developer's land within the area serviced by a contributions plan covering that area has been developed and all relevant contributions have been offset against the Surplus value.
 - (b) 75% of the areas benefiting from the Surplus value have contributed to the scheme.
 - (c) Sufficient funds exist in the fund ensuring the refund will not impact on Council's ability to carry out works contained on its rolling works programme.

Time when Developer's Obligations arise under a Planning Agreement

- 2.18 Council will generally require a Planning Agreement to provide that the Developer's obligations under the agreement take effect when the first development consent operates in respect of Development that is the subject of the agreement, and will operate progressively, in accordance with its terms, as the Development proceeds from the issue of the first Construction Certificate in respect of that Development until the grant of the final Occupation Certificate.

Implementation Agreements

- 2.19 In appropriate cases, Council may require a Planning Agreement to provide that before the Development the subject of the agreement is commenced, the Parties are to enter into an implementation agreement that provides for matters such as:
- (a) The times at which and, if relevant, the period during which, the Developer is to make provision under the Planning Agreement;
 - (b) The design, technical specification and standard of any work required by the Planning Agreement to be undertaken by the Developer;
 - (c) The manner in which a work is to be handed over to Council;

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(d) The manner in which a material Public benefit is to be made available for its Public purpose in accordance with the Planning Agreement;

(e) The management or maintenance of land or works following hand over to Council.

Monitoring and Review of a Planning Agreement

2.20 Council will continuously monitor the performance of the Developer's obligations under a Planning Agreement. This may include Council requiring the Developer (at its cost) to report periodically to Council on its compliance with obligations under the Planning Agreement.

2.21 Council will require the Planning Agreement to contain a provision establishing a mechanism under which the Planning Agreement is periodically reviewed with the involvement of all Parties. This will include a review of the Developer's performance of the agreement.

2.22 Council will require the Planning Agreement to contain a provision requiring the Parties to use their best endeavours to agree on a modification to the agreement having regard to the outcomes of the review.

Modification or Discharge of the Developer's Obligations under a Planning Agreement

2.23 Council will generally only agree to a provision in a Planning Agreement permitting the Developer's obligations under the agreement to be modified or discharged where the modification or discharge is linked to the following circumstances:

(a) The Developer's obligations have been fully carried out in accordance with the agreement;

(b) The Developer has assigned the Developer's interest under the agreement in accordance with its terms and the assignee has become bound to Council to perform the Developer's obligations under the agreement;

(c) The development consent to which the agreement relates has lapsed;

(d) There has been a material modification to the development consent to which the agreement relates;

(e) Material changes have been made to the planning controls applying to the land to which the agreement applies;

(f) The revocation or modification by the Minister for Planning of a development consent to which an agreement relates;

(g) The performance of the Planning Agreement has been frustrated by an event beyond the control of the Parties; and

(h) The Parties otherwise agree to the modification or discharge of the agreement.

Such a provision will require the modification or revocation of the Planning Agreement in accordance with the Act and Regulation.

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Assignment and Dealings by the Developer

- 2.24 Council will require every Planning Agreement to provide that the Developer may not assign its rights or obligations under the Planning Agreement nor have any dealing in relation to the land the subject of the agreement unless, in addition to any other requirements of the agreement:
- (a) Council has given its consent to the proposed assignment or dealing;
 - (b) The Developer has, at no cost to Council, first procured the execution by the person with whom it is dealing of all necessary documents in favour of Council by which that person agrees to be bound by the agreement as if they were a party to the original agreement; and
 - (c) The Developer is not in breach of the Planning Agreement.

Provision of Security under a Planning Agreement

- 2.25 Council generally will require a Planning Agreement to make provision for security by the Developer of the Developer's obligations under the Planning Agreement.
- 2.26 Unless otherwise agreed by the Parties in a particular case, the form of security required by Council will be cash or an irrevocable Bankers Guarantee approved by the Manager of Finance in favour of Council to the full value of the Developer's provision (together with projected CPI) under the Planning Agreement.

Preparation and Form of the Planning Agreement

- 2.27 Unless otherwise agreed by the Parties in a particular case, a Planning Agreement will be prepared by Council.
- 2.28 Council will generally require the Planning Agreement to be in or to the effect of the standard form Planning Agreement.

Council's Costs of Negotiating, Entering into, Monitoring and Enforcing a Planning Agreement

- 2.29 Council will generally require a Planning Agreement to make provision for payment by the Developer of Council's costs of and incidental to:
- (a) Negotiating, preparing, advertising and entering into the agreement.
 - (b) Registration of the agreement on the title of any relevant land.
 - (c) Enforcing the agreement.

The amount to be paid by the Developer will be determined by negotiation in each case. However as a general rule, Council considers that when the Planning Agreement relates to an application by the Developer for an Instrument change, or relates to an application for Development, in each case it is fair and reasonable that the Developer will pay the whole of Council's costs.

- 2.30 In particular cases, Council may require the Planning Agreement to make provision for a contribution by the Developer towards the ongoing administration of the agreement.

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Notations on Certificates under Section 149(5) of the Act

- 2.31 Council will generally require a Planning Agreement to contain an acknowledgement by the Developer that Council may, in its absolute discretion, make a notation under Section 149(5) of the Act about a Planning Agreement on any certificate issued under Section 149(2) of the Act relating to the land the subject of the agreement or any other land.

Registration of Planning Agreements

- 2.32 The Planning Agreement is to contain a provision requiring the Developer to agree to registration of the agreement pursuant to Section 93H of the Act if the requirements of that section are satisfied.

Dispute Resolution

- 2.33 Council will generally require a Planning Agreement to provide for mediation of disputes between the Parties, at their own cost, before the Parties may exercise any other legal rights in relation to the dispute. Unless the Parties agree otherwise, the Planning Agreement will provide that such mediation will be conducted pursuant to the Mediation Rules published by the Law Society of New South Wales current at the time the agreement is entered into.

Hand Over of Works

- 2.34 Council will generally not accept the hand over of a Public facility carried out under a Planning Agreement unless the Developer furnishes to Council a certificate to the effect that the work has been carried out and completed in accordance with the agreement and any applicable development consent (which certificate may, at Council's discretion, be a final Occupation Certificate, Compliance Certificate or a Subdivision Certificate) and, following the issue of such a certificate to Council, the work is also certified as complete by a Council Building Surveyor or Engineer.
- 2.35 Council will also require the agreement to provide for a defects liability period during which any defects must be rectified at the Developer's expense.

Management of Land or Works after Hand Over

- 2.36 If a Planning Agreement provides for the Developer, at the Developer's cost, to manage or maintain land that has been dedicated to Council or Public facilities that have been handed over to Council, Council will generally require the Parties to enter into a separate implementation agreement in that regard (see Clause 2.18 of this Policy).
- 2.37 The failure of the Parties to reach agreement in relation to management and maintenance of the land or facilities may be dealt with under the dispute resolution provisions of the Planning Agreement.

Public Use of Privately Owned Facilities

- 2.38 If a Planning Agreement provides for the Developer to make a privately owned facility available for public use, Council will generally require the Parties to enter into a separate implementation agreement in that regard (see Clause 2.18 of this Policy).
- 2.39 Such an agreement may, subject to Council's agreement, provide for payment to the Developer of a reasonable fee by a member of the public who desires to use the relevant facility.

Planning Agreements Entered into by Other Planning Authorities

- 2.40 The Act authorises other planning authorities to enter into Planning Agreements with Developers. These authorities include the Minister for Planning, growth centres development corporations and other public authorities designated in the Regulation. In particular, an agreement may be applied to major infrastructure and other projects approved by the Minister under Part 3A of the Act.
- 2.41 Such Planning Agreements may relate to proposed Developments or instrument changes applying to or affecting Council's area and Council needs to ensure that:
- (a) Any costs or impacts of the proposed Development or Instrument change will be adequately addressed by the agreement;
 - (b) Any opportunities or requirements to provide Public facilities under the agreement are properly pursued; and
 - (c) Any proposed benefits under the agreement are appropriately provided in the best interests of the local community.
- 2.42 To this end, where another planning authority proposes to enter into a Planning Agreement that:
- (a) Relates to a Development or Instrument change on land within Council's area; or
 - (b) Relates to a Development or Instrument change that is likely to have a cost or impact on Council's area; or
 - (c) Proposes to provide, or in the opinion of Council should provide, Public facilities within Council's area.

Council will, pursuant to Section 93F(7) of the Act, seek to become an additional party to the agreement and receive a benefit under the agreement on behalf of the State.

3.0 PROCEDURES RELATING TO THE USE OF PLANNING AGREEMENTS

This section outlines the basic procedures for the negotiation of Planning Agreements.

Council's Negotiation System

- 3.1 Council's negotiation system for Planning Agreements aims to be efficient, predictable, transparent and accountable.
- 3.2 The system seeks to ensure that the negotiation of Planning Agreements runs in parallel with applications for Instrument changes or applications for Development.
- 3.3 The system is based on principles of fairness, co-operation, full disclosure, early warning and agreed working practices and timetables.

When should a Planning Agreement be negotiated?

- 3.4 Council is required to ensure that a proposed Planning Agreement is publicly notified as part of, in the same manner as and, where practicable, at the same time as the application for Instrument change or application for Development to which it relates. The Planning Agreement must therefore be negotiated and documented before it is publicly notified as required by the Act and Regulation.
- 3.5 Council prefers that a Planning Agreement is negotiated before lodgement of the relevant application and that it accompanies the application on lodgement.

Who will negotiate a Planning Agreement on behalf of Council?

- 3.6 Council's General Manager or another Council Officer with appropriate delegated authority will negotiate a Planning Agreement on behalf of Council.
- 3.7 Councillors will not be involved in the face-to-face negotiation of the agreement.

Separation of Council's Commercial and Planning Assessment Roles

- 3.8 If Council has a commercial interest in the subject matter of a Planning Agreement as a land owner, Developer or financier, Council will ensure that the person who assesses the application to which a Planning Agreement relates is not the same person or a sub-ordinate of the person who negotiated the terms of the Planning Agreement on behalf of Council in its capacity as land owner, Developer or financier.

Role of the Governing Body of Council in relation to Applications for Development to which Planning Agreements Relate

- 3.9 Except as otherwise agreed to by the General Manager, the governing body of Council will determine applications for Development to which a Planning Agreements relates.

Involvement of Independent Third Parties in the Negotiation Process

- 3.10 Council may appoint an independent person to facilitate or otherwise participate in the negotiation of a Planning Agreement, or aspects of it, such as where:
- (a) An independent assessment of a proposed Instrument change or application for Development is necessary or desirable;
 - (b) Factual information requires validation in the course of negotiations;
 - (c) Sensitive financial or other confidential information must be verified or established in the course of negotiations;
 - (d) Facilitation of complex negotiations are required in relation to large projects or where numerous Parties or stakeholders are involved; or
 - (e) Dispute resolution is required under a Planning Agreement.
- 3.11 The costs of the independent person will be borne by the Developer.

Key Steps in the Negotiation Process

- 3.12 The negotiation of a Planning Agreement will generally involve the following key steps:
- (a) Before lodgement of the relevant application by the Developer, the Parties will decide whether to negotiate a Planning Agreement;
 - (b) The Parties will then appoint a person to represent them in the negotiations;
 - (c) The Parties may also appoint a third person to attend and take minutes of all negotiations;
 - (d) The Parties will also decide whether to appoint an independent person to facilitate or otherwise participate in the negotiations or aspects of it;
 - (e) The Parties will also agree on a timetable for negotiations and the protocols and work practices governing their negotiations;
 - (f) The Parties will then identify the key issues for negotiation and undertake the negotiations, including any negotiations or consultations with relevant public authorities;
 - (g) If agreement is reached, Council will prepare the proposed Planning Agreement and provide a copy of it to the Developer;
 - (h) The Parties will undertake further negotiation on the specific terms of the proposed Planning Agreement;
 - (i) Once agreement is reached on the terms of the proposed Planning Agreement, the Developer will be required to execute the agreement;
 - (j) The Developer may then make the relevant application to Council accompanied by a copy of the proposed agreement; and

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- (k) The Parties may be required to undertake further negotiations and, hence, a number of the above steps as a result of the public notification and inspection of the Planning Agreement or its formal consideration by Council in connection with the relevant application.

Public Notification of Planning Agreements

- 3.13 A proposed Planning Agreement must be publicly notified and available for public inspection for a minimum period of 28 days.
- 3.14 As mentioned, Council is required to ensure that a proposed Planning Agreement is publicly notified as part of, in the same manner as and, where practicable, at the same time as the proposed Instrument change or application for Development to which it relates. Where it is not practicable to notify the Planning Agreement at the same time as the Instrument change or application it must be notified as soon as possible afterwards.
- 3.15 Where the proposed Instrument change or application for Development to which a Planning Agreement relates is required by or under the Act or Regulation to be publicly notified and available for public inspection for a period exceeding 28 days, Council will publicly notify the Planning Agreement and make it available for public inspection for that longer period.
- 3.16 Where the application for Development to which a Planning Agreement relates is permitted by or under the Act or Regulation to be publicly notified and available for public inspection for a period of less than 28 days, Council will publicly notify the application and make it available for public inspection for a minimum period of 28 days.
- 3.17 Council will publicly re-notify and make available for public inspection a Planning Agreement and the Instrument change or application for Development to which it relates if, in Council's opinion, a material change is made to the terms of the agreement, the Instrument change or the application after it has been previously publicly notified and inspected. Such a change may arise as a consequence of public submissions made in respect of the previous public notification and inspection of the agreement, the Instrument change or the application, or their formal consideration by Council, or for any other reason.

When is a Planning Agreement required to be entered into?

- 3.18 Council will usually require a Planning Agreement to be entered into as a condition of granting development consent to the Development to which the agreement relates and, in the case of a Planning Agreement relating to an instrument change:
- (a) Prior to the granting of any development consent that relies on the instrument change; or
 - (b) Unless and until this has occurred, as a condition of granting consent to any Development that relies on the instrument change.
- 3.19 Generally, Council will sign the Planning Agreement on the same day, or as soon as possible after the day, that the development consent or Instrument change to which the agreement relates, is granted or made.

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- 3.20 A Planning Agreement is entered into when it is signed by all of the Parties.
- 3.21 A Planning Agreement can be entered into at any time after the agreement is publicly notified in accordance with the Act and Regulation.

Planning Agreement Register

- 3.22 Council is required to keep a register of Planning Agreements applying to land within Council's area, whether or not Council is a party to a Planning Agreement. Council is required to record in the register the date an agreement was entered into and a short description of the agreement (including any amendment).
- 3.23 Council will make the following available for public inspection (free of charge) during ordinary office hours:
 - (a) The Planning Agreement register kept by Council;
 - (b) Copies of all Planning Agreements (including amendments) that apply to the area of Council; and
 - (c) Copies of the explanatory notes relating to those agreements or amendments.
- 3.24 Council will also make its Planning Agreement register available to the public on its web site.

LEGISLATION: ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979
DEPARTMENT: SHIRE PLANNING

DCP No.
65

Wyong

On Site Effluent Disposal in Non Sewered Areas Development Control Plan

This Development Control Plan (DCP) may be amended from time to time by Council. Proposed amendments are required to be advertised and exhibited in draft form and any submissions received must be considered by Council before the amended plan is adopted. People using this DCP should ensure that they have the current copy of the plan, including any amendments. If in doubt, please check with Council's Customer Service Centre.

Adopted as per council resolution Dated:	
Effective:	
Certified in accordance with the Environmental Planning and Assessment Act 1979 and Regulations	General Manager:
	Dated:

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1.0 INTRODUCTION

As a region of natural beauty with a significant tourist industry it is important to protect our lakes, rivers and creeks from pollution. As Council is a regulatory stakeholder in this area it is legally obliged to ensure that development does not detrimentally impact on the environment. Many waterways suffer environmental damage as a result of incremental pollution rather than from one pollution event. Both groundwater and surface water influenced by discharged effluent are a prime example of this.

This policy describes Council's requirements for on-site disposal of effluent from residential premises. The policy has been developed after considering legislative requirements of the Local Government (General) Regulation 2005 (LG Regulation), The On-site Domestic Wastewater Management AS/NZS 1547-2000, and relevant experience.

Over recent years, Council has become increasingly concerned with the cumulative environmental impacts and local public health risk of failing or inadequately designed on-site sewage management systems for effluent in non-sewered areas. On-site sewage management systems often fail because of the inability of the site to cope with effluent absorption due to impermeable clay soils, overloading of the systems with large volumes of wastewater, inappropriate design and lack of proper maintenance.

Where connection to a reticulated sewerage system is not practical, installation of an on-site sewage management system is an acceptable alternative only if site conditions are suitable for effluent disposal. Pump-out systems are no longer approved for new dwellings, and are not considered an alternative system due to improper use of these systems and the unsustainable nature of their operation.

Not all sites have natural characteristics suitable for on-site disposal of effluent, such as sites with excessive slope, flood potential, high ground water and those features considered as site limitations when undertaking the site report. In these cases, the site will need to be improved, or an alternative system employed (see section 3.7).

The development of land for residential purposes in areas not serviced with a reticulated sewerage system can present potential environmental and public health risks as a result of inadequate on-site disposal of effluent.

This Chapter is a resource tool as well as a working document that aims to protect our waterways from pollution and in particular pollution from on site effluent disposal, by setting minimum standards for the disposal of effluent on site in conjunction with relevant guidelines and legislation.

1.1 Aims and Objectives

This plan aims to protect the health of people within Wyong Shire through proper on site effluent disposal and to minimise the impacts from on site effluent disposal on the natural environment by:

- The prevention of the spread of disease by micro-organisms;
- The prevention of the spread of foul odours;
- The prevention of contamination of water;
- The prevention of degradation of soil and vegetation;
- The implementation of measures to discourage insects and vermin;

- To ensure that persons do not come into contact with untreated sewage or effluent (whether partially treated or not) in their ordinary activities on the premises concerned;
- To encourage the re-use of resources (including nutrients, organic matter and water); and
- To minimise any adverse impacts on the amenity of the land on which it is installed or constructed and other land in the vicinity of that land.
- To ensure, when approving new and upgraded systems, the impacts of climate change are considered including in relation to the location of the system.

1.2 Application

This plan is a Development Control Plan (DCP) prepared and adopted pursuant to Section 72 of the Environmental Planning and Assessment Act 1979 (the Act) and relevant clauses of the Environmental Planning and Assessment Regulation 2000. It also forms part of the Local Approvals Policy adopted as provided by the provisions of the Local Government Act 1993. It is a document for the general guidance of Council in the exercise of its duties and functions under the Act. The plan applies to all land in the Shire of Wyong to which Wyong Local Environmental Plan 1991 (WLEP, 1991) applies.

In circumstances where there may be any inconsistency between the requirements contained in this plan and any other Council development control plan, the provisions of this plan apply.

1.3 Relationship to other Legislation

This Plan should be read in conjunction with the relevant provisions of

- Wyong Local Environmental Plan 1991 (WLEP):

WLEP outlines the requirements for the use of land and the operating standards for development within the Shire.

- The Local Government Act 1993 (LG Act):

The Local Government Act Section 68 Table item C5 requires that the approval of Wyong Shire Council is to be granted prior to the installation, construction or alteration of a waste treatment device or a human waste storage facility or a drain connected to any device.

- The Local Government (General) Regulation 2005 (LG Regulation):

Part 2 Division 4 of the regulations to the Local Government Act set out the requirements relating to the approval for the management of waste. Part 2 Division 4 subdivisions 6 and 7 outlines the requirements required to operate a sewerage management system. Details regarding the latter are also outlined in Council's On Site Sewage Management Strategy.

- The Environmental Planning and Assessment Act 1979(EP&A Act):

In relation to on site sewage management systems (OSSMS) the EP&A Act identifies procedures for assessment of certain activities identified as "Designated Development" in its accompanying Regulation. These activities must be assessed via the submission of a Development Application accompanied by an Environmental Impact Statement (EIS).

- The Environmental Planning and Assessment Regulation 2000 (EP&A Regulation):

Schedule 3 of the Regulation defines certain types of sewerage systems or works on land as "Designated Development". These are sewerage systems or works which:

- 1 Treat sewage and:
 - a) Have an intended processing capacity of more than 2500 persons equivalent capacity or 750 kilolitres per day, or
 - b) Have an intended processing capacity of more than 20 persons equivalent capacity or 6 kilolitres per day and are located:
 - i) on a flood/plain, or
 - ii) within a coastal dune field, or
 - iii) within a drinking water catchment, or
 - iv) within 100 metres of a natural water body or wetland, or
 - v) within 250 metres of a dwelling not associated with the development.
- 2 Incinerate sewage or sewage products.
- 3 Sewer mining systems or works that extract and treat more than 1,500 kilolitres of sewage per day.
- 4 This clause does not apply to:
 - a) the pumping out of sewage from recreational vessels, or
 - b) sewer mining systems or works that distribute treated water that is intended to be used solely for industrial purposes.

- Protection of the Environment Operations Act 1997 (POEO Act)

Schedule 2 of the POEO Act outlines the licensing requirements prescribed by the Environment Protection Authority for sewage treatment systems.

1.4 Other Standards that apply

Other standards that apply include:

- AS/NZS 1547-2000 (On Site Domestic Waste Water Management) – On-site Sewage Management for Single households

This Combined Australian New Zealand Standard provides guidelines for designing maintaining and installing disposal systems.

- Environment & Health Protection Guidelines for single Households (1998) (EHPG)

These guidelines produced by the NSW Department of Local Government also provide guidelines for the design, installation and maintenance of disposal systems.

- AS/NZS 3500 National Plumbing and Drainage

This Combined Australian New Zealand Standard provides guidelines for the design and installation of sanitary plumbing and drainage within buildings.

1.5 Abbreviations

AWTS – Aerated Wastewater Treatment System

DCP – Development Control Plan

DDR – Design Disposal Rate

EHPG – Environment and Health Protection Guidelines for Single Households

EIS – Environmental Impact Statement

EP&A Act – Environmental Planning and Assessment Act, 1979

EP&A Regulation – Environmental Planning and Assessment Regulation, 2000

ETA – Evapo-Transpiration Area

ETR – Evapo-Transpiration Rate

LAA – Land Application Area

LG Act – Local Government Act 1993

LG Regulation – Local Government (General) Regulation 2005

OSSMS – On Site Sewage Management System

POEO Act – Protection of the Environment Operations Act, 1997

RSF – Recirculating Sand Filter

SSD – Sub Surface Disposal

WLEP – Wyong Local Environmental Plan 1991

2.0 Performance Criteria

An Application to install an OSSMS must be primarily assessed against the performance objectives outlined in the following table. The performance objectives stipulate a standard at which an OSSMS must operate and be maintained.

It should be noted that a system designed and maintained to meet the prescriptive requirements in Sections 3 and 5 are deemed to meet the performance objectives in this

section. While the objectives are designed to give flexibility in the selection of appropriate treatment systems for specific localities, there are situations where on site sewage management is not possible such as below the 1 in 100 year flood level in water supply catchments or on steep and shallow soils.

PERFORMANCE MEASURES	PERFORMANCE OBJECTIVES TO BE MET *							
	A	B	C	D	E	F	G	H
It's design being appropriate to the site and soil conditions, having also considered the potential for mass movement or slope failure	✓	✓	✓	✓		✓		✓
Maintaining the system to enable operation in accordance with the manufacturer's specifications, NSW Health's accreditation and the approvals to install and operate issued by Council.	✓	✓	✓	✓	✓	✓	✓	✓
Managing liquid and solid inputs so as to not affect the viability and sustainability of the sewage management system.	✓	✓	✓	✓		✓	✓	✓
Treating effluent in an accredited sewage management system appropriate to the intended loading of the system.	✓	✓	✓	✓	✓	✓		✓
Conveying sewage to a suitable area for disposal of effluent appropriate to the intended loading of the application area.	✓	✓	✓	✓	✓	✓	✓	✓
Providing adequate erosion and sedimentation controls before, during and after construction/installation of the sewage management facility.				✓				✓
Ensuring the system is specifically designed and is considered consistent with its function and its use.	✓	✓	✓	✓	✓	✓	✓	✓
Installing appropriately positioned diversion drains around the land application area.	✓	✓	✓	✓		✓	✓	✓
Carefully identifying and selecting areas for the disposal of effluent whilst taking into account the local climate, surface and ground water hydrology, soil characteristics and vegetation types.	✓	✓	✓	✓	✓	✓	✓	✓

OBJECTIVES:*A** – Prevent the Spread of Disease by Micro-organisms**B** – Prevention of the Spread of Foul Odours**C** – Preventing Contamination of Water**D** – Preventing Degradation of Soil & Vegetation**E** – The Discouragement of Insects and Vermin**F** – Ensure that persons do not come into contact with Untreated Sewage or Effluent (whether treated or not) in their ordinary activities on the premises concerned**G** – The re-use of Resources (including nutrients, organic matter and water).**H** – The minimisation of any adverse impacts on the amenity of the land.

3.0 SYSTEM SELECTION

3.1 What current technologies are available to me to dispose of effluent on site?

The following is a summary of some of the more commonly known on-site wastewater treatment technologies on which these guidelines are based. Included are general operating and sizing requirements for each particular system for domestic applications. It should be noted that when investigating the system solution for your property that the treatment tank/ holding device be located above the 1 in 100 flood contour and land application area above that 1 in 20 flood contour except in Wyong's drinking water catchment where no component of the system will be permitted in any flood land below the 1 in 100 flood contour. In addition, the general site, environmental and soil conditions of the allotment must not constitute more than a low hazard limitation in terms of the systems effects. Section 4 of this document will assist you in determining the liabilities of your site whilst appendix D will allow you to hazard categorise your land.

3.2 Conventional septic tank and absorption systems

Traditionally, in unsewered areas, effluent from dwellings has received primary treatment in a conventional septic tank before being absorbed in underground trenches. This system has relied on the soil completing the treatment process as the effluent moves through the strata. Not all soils or sites are suitable for absorption trenches, particularly in village areas with small blocks and soils with poor soil structures. In some areas, Council has had to provide a pump-out system whereby the effluent is pumped out by a road tanker, transported and treated at one of Council's sewage treatment works. Such systems are no longer considered acceptable given their misuse and maintenance problems.

Even on large allotments, the soils must have the correct characteristics to satisfactorily treat the effluent. Unsuitable landscapes may cause effluent to reach the surface and/or groundwater and adversely affect receiving water bodies. Certain landscapes within the Wyong LG Act do not have the characteristics necessary to treat effluent from septic tank systems without having a cumulative adverse impact on the receiving environment.

Areas of this nature may be limited in terms of development density, due to the environmental characteristics and the outlined objectives.

3.2.1 How Does a Septic Tank Work?

A Septic Tank system usually comprises two chambers. These chambers can be separate or within the one tank. The first or primary chamber allows some of the solids to settle to the bottom of the tank and oils and fats to rise to the surface to form a scum layer.

The solids that have settled to the bottom of the primary chamber undergo anaerobic bacterial digestion producing sludge. During this bacterial process the composition of the effluent changes producing lower levels of chemicals and pathogens.

The second chamber or holding well accumulates smaller amounts of solids and scum prior to the effluent leaving the tank for discharge to the land application area (LAA). To ensure that solids do not reach the LAA an approved in-tank filter must be installed in such a manner to enable easy

removal for cleaning on a regular basis. The tank must provide a retention time of at least 24 hours so that the effluent undergoes adequate anaerobic bacterial digestion and the flow of effluent to the LAA is controlled to avoid flooding. A cross section of a septic tank is depicted in figure 1, below.

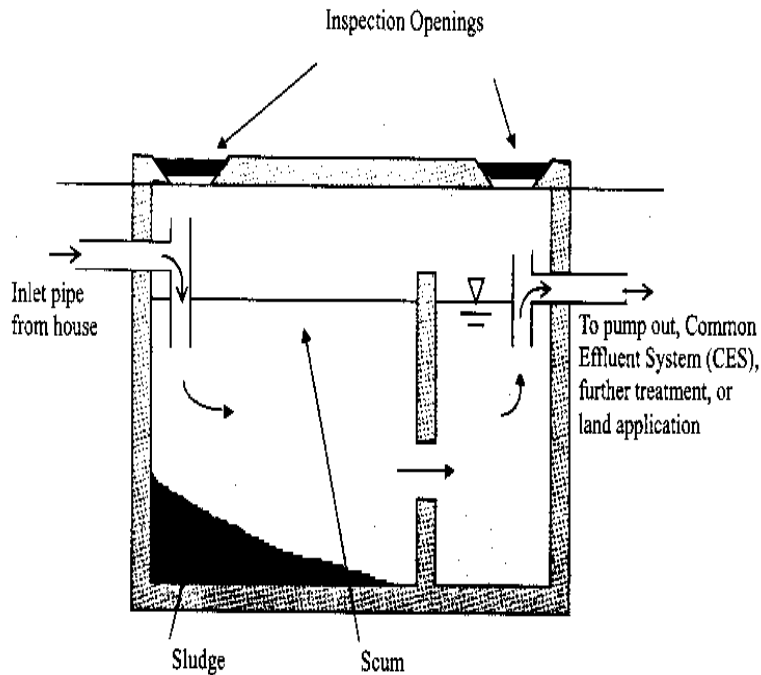


Figure 1: Cross-section of Septic Tank

The wastewater from a septic tank is not disinfected and has high nutrient levels; therefore it poses a health risk and is environmentally hazardous. Table 1 provides a general overview of the expected effluent quality from a septic tank before it is discharged to the LAA. As the discharge is hazardous all primary treated effluent is disposed of below ground. It is therefore important to maintain and monitor your LAA to ensure that water from the trench or transpiration area does not resurface.

PARAMETER	CONCENTRATION
Biochemical Oxygen Demand (BOD)	150 mg/l
Suspended Solids (SS)	50mg/l
Total Nitrogen (N)	55 - 60mg/l
Total Phosphorous (P)	10 - 15 mg/l
Faecal Coliforms	1000000-100000000 cfu / 100ml

Table 1 Septic Tank Expected Effluent Quality (Source: EHPG 1998)

For Council to be able to approve the installation of a septic tank the applicant must supply the NSW Department of Health's (NSW Health) certificate of accreditation. In addition the tank itself must clearly indicate the day, month and year of manufacture, the manufacturers name or registered trademark and the capacity of the unit in litres.

3.2.2 What Size Does My Septic Tank Have to Be?

The minimum size of a domestic septic tank accredited in NSW is 2300 litres. The following equation can be used to determine a specific tank size relevant to the number of persons (max) residing in your dwelling.

The Hunter and Central Coast Region of Council's require a 3000 litre tank as a minimum for a three-bedroom dwelling.

$$STC = HLR \times N + BA$$

Where:

STC = Septic Tank Capacity (litres)

BA = Basic Allowance for sludge = 1550 litres

HLR = Hydraulic Loading Rate (litres/person/day)

N = Number of Persons (max) in dwelling

3.2.3 Do I Need a Filter in My Septic Tank?

To ensure that solids do not reach the LAA an approved in-tank filter must be installed in such a manner to enable easy removal for cleaning on a regular basis. A number of in-tank filters are currently available on the market. The preferred type of device is a conical filter that has an aperture of not greater than 1mm and is fitted to the outlet square of the tank. It is recommended that the filter be cleaned at 6 monthly intervals.

3.2.4 Soil Absorption Systems

There are two types of soil absorption systems commonly used to dispose of effluent from a septic tank. They are Absorption Trenches and Evapo-transpiration areas. These are outlined below.

3.2.5 How Does an Absorption Trench Work?

The absorption or sullage trench receives primary treated effluent from the septic tank. The role of the trench is to evenly discharge this effluent to the subsoil. The subsoil then filters the effluent as it percolates through. It is therefore essential that the permeability of the soil in the LAA is limited to between 5mm/day (silty Clay) and 80mm/day (sandy loam). If a seasonal or permanent water table is within 1 metre of the surface of the proposed LAA the land is not suitable for absorption trenches. If the site conditions are not within these parameters the effluent may impact on the health and amenity of the environment.

3.2.6 What Size Does My Absorption Trench Have to Be?

The following equation sourced from AS / NZS 1547:2000 shall be used to determine the length of an absorption trench in lineal metres.

$$L = \frac{HLR}{DLR \times W}$$

Where:

L = Length of trench (metres)

HLR = Hydraulic Loading Rate (litres)

DLR = Design Loading Rate (litres)

W = Width of trench (metres)

Note:

Appendix A (AS/NZS 1547:2000) outlines the hydraulic loading rate. The DLR figure can be found in AS/NZS 1547:2000.

A depiction of a typical absorption trench is shown in figure 2, below.

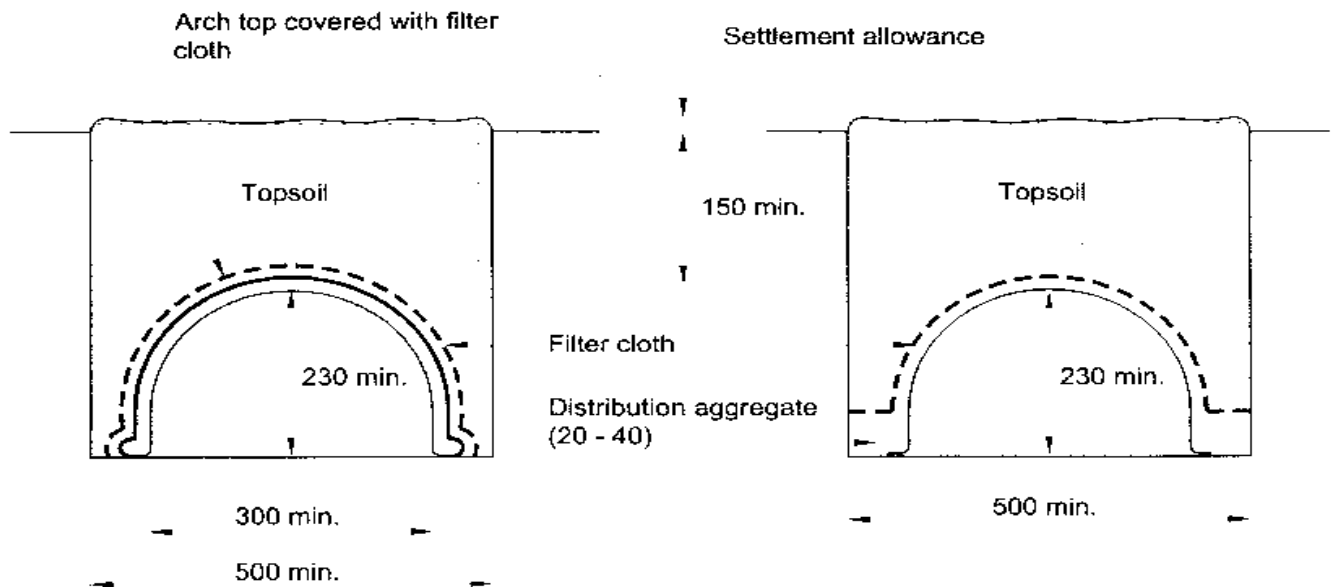


Figure 2: Typical Absorption Trench Design

3.2.7 How Does an Evapo-Transpiration Area Work?

An Evapo-Transpiration Area (ETA) is a LAA of a predetermined size that is surrounded on all sides by impervious bunding usually consisting of clay. The base of the ETA is also lined with impervious clay.

Across the high side of the ETA is a distribution trench which discharges along its length to the bed of the ETA. The base of the bed has a minimum cross fall of 1%. On top of the base is a layer of 40mm to 50 mm diameter stones. Over this is laid geo-textile fabric on which sandy loam is placed. This top layer is then planted out with a nutrient tolerant grass.

The effluent enters the ETA via the distribution trench and from there into the bed. The hydraulic content of the effluent is evaporated or transpired by the grass into the atmosphere.

3.2.8 What Size Does My Evapo-Transpiration Area Have to be?

The following equation shall be used to determine the size of an ETA in square metres.

$$A = \text{HLR} \div \text{ETR}$$

Where:

A = Area in square metres

HLR = Hydraulic Loading Rate (L/Person/Day)

ETR = Evapo-Transpiration Rate (L/Square Metre/Day)

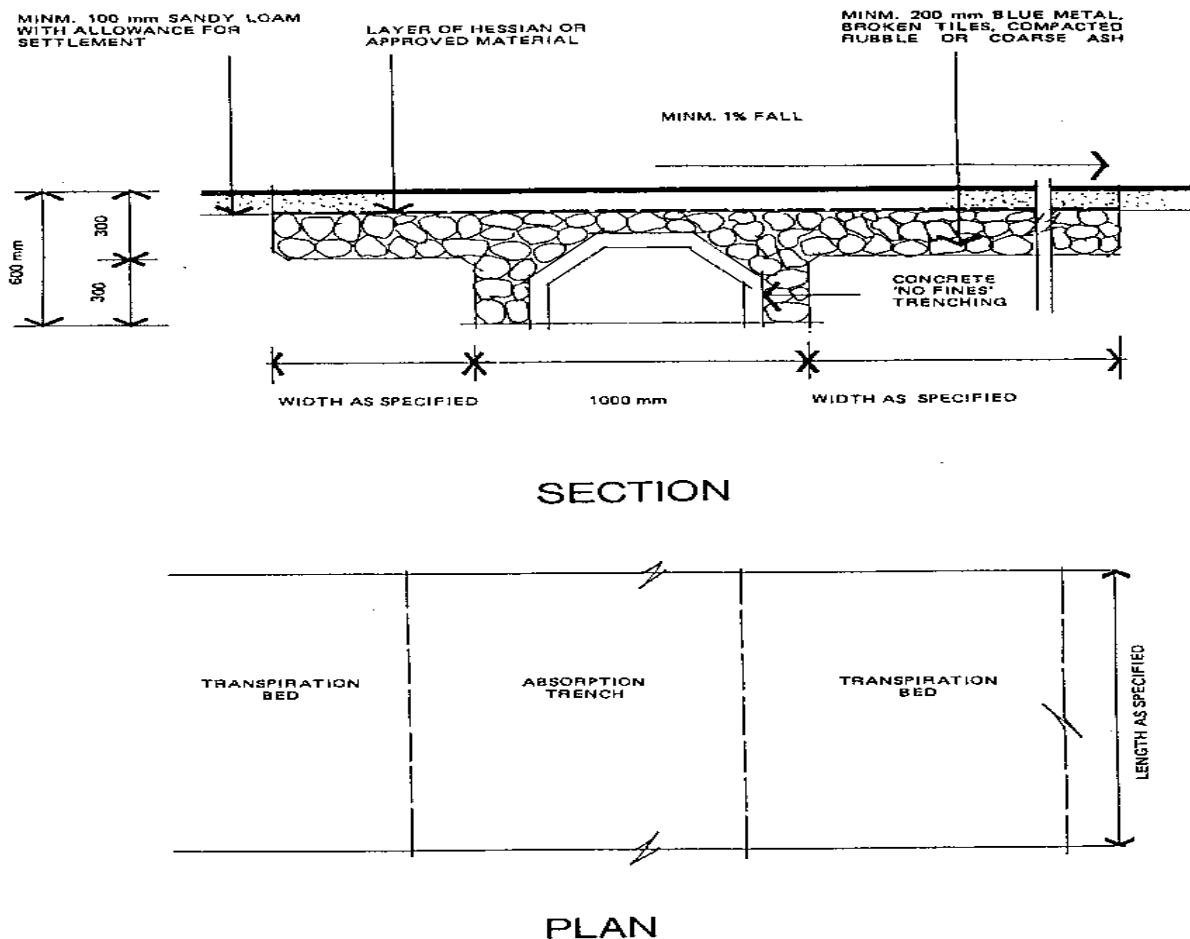
Note:

An additional 93 square metres shall be added to the calculated size of the ETA if an automatic washing machine is installed in the dwelling. In addition concession may be granted should water saving technologies be installed in the dwelling.

Based on:

The HLR is calculated using Appendix A (AS/NZS 1547:2000) of this document and the ETR using a standard figure of 4.25 litres/ square metre/day. It should be noted that the standard ETR figure given is conservative. If it is considered by the designer that the local conditions in conjunction with the vegetation chosen for the ETA will provide a better ETR then a water balance analysis over a twelve month cycle must be undertaken.

A standard detail of an ETA is shown in Figure 3 below.



Note: Drainage disposal areas (absorption trenches and transpiration beds) are to be constructed to the sizes and in positions specified on Drainage Layouts.

The absorption trench is to be located in the transpiration bed in the position indicated on the layouts and the bottom of the transpiration beds to be level throughout.

Drainage disposal areas are to be finished with sufficient sandy loam to allow for settlement and after settlement are to have minimum fall necessary to shed surface water. The natural ground forming the lower side of the bed is to be graded level. Impervious retaining walls may be required to achieve this objective.

Any concentrated flow of surface water is to be diverted clear of drainage disposal area to Council satisfaction.

Disposal areas should be turfed as soon as possible following construction. Turfing of disposal areas is to be carried out at the time of construction of disposal areas when directed.

Figure 3: Evapo-Transpiration Area

3.3 Aerated Wastewater Treatment Systems (AWTS)

3.3.1 How Does an Aerated Wastewater Treatment System Work?

The aerated wastewater treatment system (AWTS) is an alternative to the conventional septic system. This effluent is treated to a level known as tertiary treatment with the effluent undergoing disinfection by chlorination or ultra violet light in various chambers of a tank to remove bacteria and other micro-organisms.

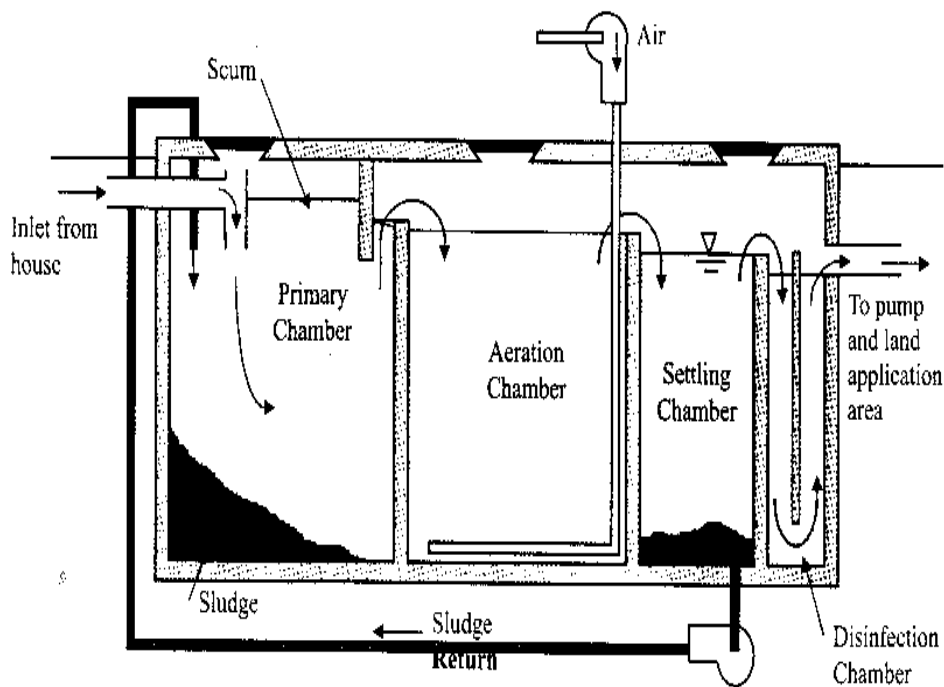


Figure 4: Aerated Wastewater Treatment System

This level of treatment allows the effluent to be spray irrigated above ground or discharged in a shallow sub surface bed, in most situations without any major health risk. Table 2 outlines an overview of expected effluent quality from an AWTS.

PARAMETER	CONCENTRATION
Biochemical Oxygen Demand (BOD)	20 mg/l
Suspended Solids (SS)	30mg/l
Total Nitrogen (N)	15-35mg/l
Total Phosphorous (P)	10-15 mg/l
Faecal Coliforms	Up to 30 cfu/100ml

Table 2: AWTS Expected Effluent Quality (EHPG, 1998)

Because the effluent is treated to a higher standard than the conventional septic tank, it contains fewer potential harmful pathogens and as such its impact on the health and amenity of the locality is not as great.

The exception is when an AWTS is not regularly maintained. Without regular maintenance by a suitably qualified person, significant public health and pollution problems can eventuate.

3.3.2 What Size Does My Aerated Wastewater Treatment System Have to Be?

All AWTS are required to have NSW Health accreditation. All AWTS accredited in NSW have a 10 person capacity (expressed as a 10 EP system). An AWTS of this size will cater for most residences. Should your situation require a system greater than 10 EP a special design would be required. This is covered later in this chapter under alternative systems.

3.3.3 Does My Aerated Wastewater Treatment System Need a Filter?

As with septic tank absorption systems a filter is required to be installed to all AWTS to restrict solids and sludge from finding its way to the disposal nozzles whether they be sprayers, drippers, or the like. Should solids find their way to these nozzles they may block causing localised inundation of the disposal area and the irrigation pump to burn out. It is also essential to ensure that the filter does not block, as blockage will also result in the same problems.

3.4 Disposal Options for Aerated Wastewater Treatment Systems

3.4.1 What is Surface Irrigation?

Surface irrigation utilises a specific area of your land. The site feasibility assessment will identify the most appropriate area to dispose of effluent over the irrigation field (LAA). Within this area the distribution line that comes from the outlet of the AWTS is laid. Along this line is a series of sprayers, drippers or soaker attachments that discharge the treated effluent.

The most common method of application for surface irrigation is by sprayers or sprinklers. Sprayers or sprinklers are usually low pressure devices. To ensure effluent does not detrimentally effect the environment and public health the spray head plume radius of the device should not exceed 2 metres and with a plume height not greater than 400 mm. This standard ensures that the prescribed buffer distances outlined in Appendix D protect the environment and public health.

In addition to the standard sprinkler used for surface irrigation, alternative designs will be considered. Appendix B outlines the requirements for a specific type of pulsating pop up sprinkler.

The effluent is absorbed by the soil, taken up by vegetation or evaporated. Suitable vegetation for land application areas can be found in Appendix C.

Surface irrigation of effluent has drawbacks particularly when the LAA is inadequate to deal with the effluent or where the prevailing conditions are not favourable. Poor soil, land slope, overland water flow and inclement weather may cause effluent to leave both the LAA and the site. The wayward effluent is discharged into the receiving environment causing adverse cumulative effects. The installation of shallow bed subsurface irrigation may overcome this constraint where local conditions permit.

3.4.2 What Size Does My Surface Irrigation Area Have to Be?

Over recent years there has been conjecture as to the correct method in sizing the LAA whereby the disposal method is surface irrigation. These methods include determining the hydraulic and nutrient outputs of an AWTS and applying these characteristics to an equation.

In most cases a determination based on the total nitrogen concentration will be the limiting factor. Accordingly, the following method can be used to determine the appropriate size of the irrigation area in square metres:

$$\text{SIA} = \frac{\text{TN} \times \text{N} \times \text{HLR}}{\text{CLR}}$$

Where:

SIA = Surface Irrigation Area (square metres)

TN = Total Nitrogen Output of AWTS (mg/l)

HLR = Hydraulic Loading Rate (L/person/day)

N = Number of persons (max) in dwelling

CLR = Critical Loading Rate = 25 mg/Sqr m/d (EHPG pp152-153)

Note:

The total nitrogen output of an AWTS is taken to be the figure stated in the NSW Health accreditation document for the system in question. The critical loading rate is a nominal value. Should a revised rate be used in this calculation then supporting evidence will need to be submitted to justify the case.

Furthermore the preferred method may be substituted by alternative solutions; however, a report must accompany the proposal outlining the aims, methods and results of the procedure as well as how this complies with the objectives of this plan so that Council can undertake an assessment of the procedure.

3.4.3 What Is Sub Surface Disposal?

As its name describes sub surface disposal is the method of discharging effluent below the ground to deal with sewage on site.

The system entails an arrangement of plastic irrigation pipes designed to discharge effluent evenly along their length (pressure compensating line). The pressure compensating line is similar to that used in agricultural applications for irrigation. The difference however is the inclusion of chemicals to inhibit root intrusion into the pipe work and bacterial growth inside the line. Pressure compensating line used for effluent disposal can be identified by a pink stripe along its length whilst agricultural irrigation line is identified by a purple stripe.

The principle of AWTS sub surface disposal (SSD) is similar to that of an ETA in that the effluent is evaporated from the ground and transpired by the vegetation on the surface area. It is essential that the pressure compensating line is situated at the right depth being 150 mm below the surface. As an ETA is a closed disposal system there is no loss of effluent outside the LAA however SSD does allow the export of effluent from the LAA through percolation.

In New South Wales the technology of discharging effluent from an AWTS below the ground is a recent occurrence. Prior to this all AWTS effluent was spray irrigated in a designated disposal area. For some sites this produced problems in being able to dispose of effluent in an environmentally responsible manner due to the likelihood of effluent leaving the site or effecting sensitive areas. Subsurface irrigation overcomes some of these constraints and enables more difficult sites to be able to deal with effluent on site.

3.4.4 What Size Does My Sub Surface Disposal Area Have to Be?

The following equation shall be used to determine the size of the LAA for sub surface irrigation in square metres.

$$A = \text{HLR} \div \text{DDR}$$

Where:

A = Area (Square metres)

HLR = Hydraulic Loading Rate (L/Person/Day)

DDR = Design Disposal Rate (L/Square Metre/Day)

Note:

An additional 93 square metres shall be added to the calculated size of the LAA if an automatic washing machine is installed in the dwelling. In addition concession may be granted should water saving technologies be installed in the dwelling.

Based on:

The HLR is calculated using Appendix A (AS/NZS 1547:2000) of this document. It should be noted that the standard DDR figure given is conservative. If it is considered by the designer that the local conditions in conjunction with the vegetation chosen for the LAA will provide a better DDR then a water balance analysis over a twelve month cycle must be undertaken.

3.5 Recirculating Sand Filters

3.5.1 What is a Recirculating Sand Filter?

A recirculating sand filter (RSF) is an enhanced effluent treatment device that is situated between a septic tank or an AWTS and the land application area. They are usually constructed utilising a container such as a large concrete or reinforced plastic tub. The tub is filled with a specified grade of sand to the level of the outlet manifold. The manifold has outlet or orifice shields placed over the openings from which the effluent is pumped. The manifold is covered with either a coarser sand grade or pea gravel to enhance and protect the system (figure 5). An RSF is required to have NSW Health accreditation.

3.5.2 How Does a Sand Filter Work?

Effluent from the treatment tank is pressure dosed by a pump over the surface area of the sand filter. The effluent then percolates through the sand. A percentage of this effluent is returned to the pump chamber and then reapplied to the sand filter. This gives the device its name. The remaining effluent is conveyed to the land application area for disposal.

Sand filters are a system to enhance the quality of effluent that is produced. Sand filters under normal conditions will decrease nitrogen by converting nitrates into nitrogen gas. In some situations nitrogen levels could be decreased to below 5mg/l.

De-nitrification from this process has also lead to phosphorous levels of less than 10 mg/l. In addition sand filters promote the growth of aerobic bacteria due to the filter's environment. A food source (nutrient rich effluent) for the bacteria is supplied to the bacteria on a regular basis throughout the day. Aerobic bacteria are essential in dealing with the treatment of *e-coli* and *faecal coli* forms present in the effluent.

Like most effluent treatment systems sand filters require regular maintenance. The method and considerations for servicing a sand filter is outlined in clause 5.4 of this document.

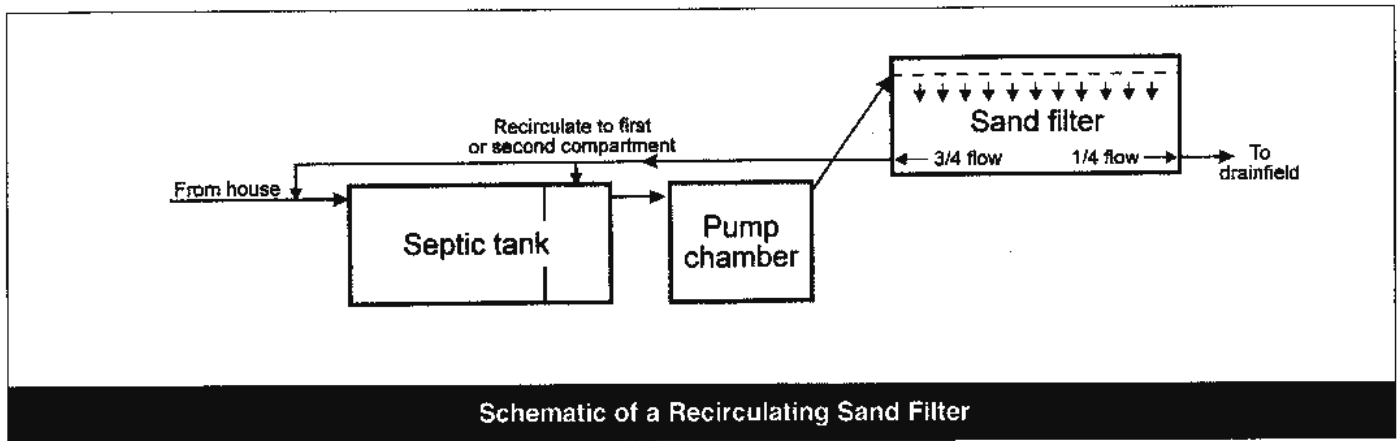


Figure 5: Sand Recirculating Filter

3.6 Composting Toilets

There are two types of composting toilets currently available in NSW, dry composting and wet composting. They function with a no flush toilet pedestal or alternatively with moisture from cistern flushing.

In these systems, toilet wastes pass from the pan down a chute and into a chamber similar in size to a conventional septic tank. All faecal matter and other compostable matter produced in the dwelling, such as toilet paper, may be disposed of to this system where it is broken down into compost by natural decomposing organisms. When fully broken down, the compost may be used in gardens but must be buried and covered.

A fan connected to a vent pipe produces negative air pressure within the composting chamber. The fan aims to draw odours away from the toilet pan and evaporate excess liquid from the composting chamber in dry composting toilets.

A cross section of a composting toilet is depicted in figure 6.

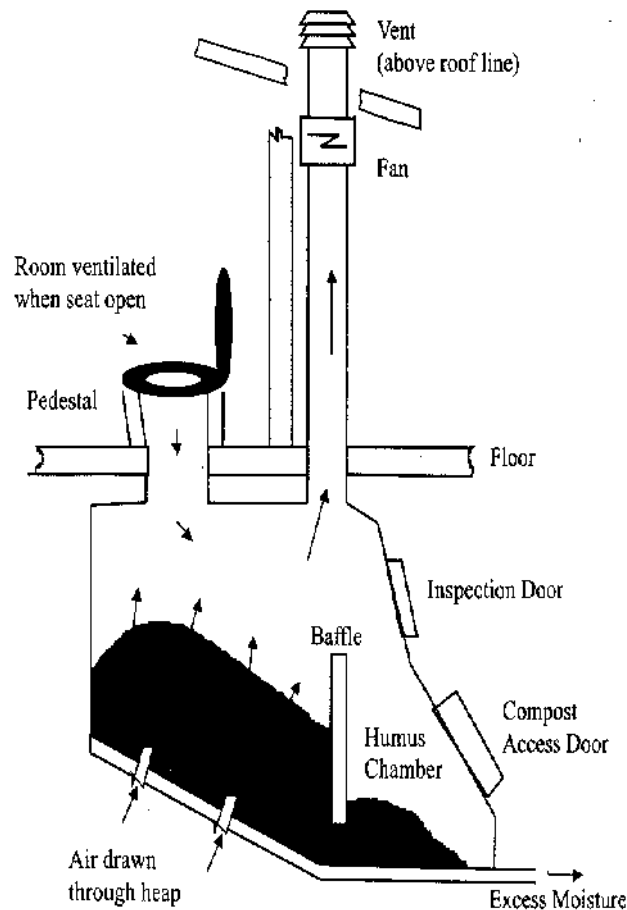


Figure 6: Composting Toilet

These systems treat only toilet wastes, and all other liquid wastes from the shower, kitchen and laundry (sullage wastes or grey water) must be disposed of via a separate grey water system. These systems discharge to subsurface disposal areas such as absorption trenches or evapotranspiration areas. The dry composting toilet itself produces only a small amount of liquid wastes where operated in accordance with the manufactures specifications.

3.7 Other Alternative Systems

Increasing awareness of environmental issues has seen significant changes to domestic effluent disposal in the last decade. This trend is likely to continue with new products coming onto the market. As such, certain installations are not described in the above information. This does not mean that Council will not assess an application for an alternative system; however, it does mean that Council must assess the proposal on its merits.

In such cases the applicant must provide designs and reports by suitably qualified professionals in the field of effluent disposal, demonstrating how the system will meet all relevant standards and legislation and the objectives of this DCP.

3.8 Accreditation of Waste Treatment Devices

Clause 41 of the LG Regulation provides that Council cannot approve an application to install an "off the shelf" waste treatment device unless the Council is satisfied that the device has been accredited by the Director General of the NSW Department of Health.

The LG Regulation is intended for both domestic and commercial systems and prescribes the details required for assessment by Council. These details are outlined in Clause 26 of the LG Regulation.

With regard to non accredited systems it is up to the applicant to prove that the system is capable of operating to a level acceptable to Council and that the system meets the requirements of the regulation. The standard of effluent quality required to be met is generally of a secondary level. NSW Health stipulates a range that secondary treated effluent must meet.

To prove to Council that a system has an end effluent quality of this standard a report from an engineer or decentralised effluent treatment expert is required.

In summary:

- * Council has the ability to approve any decentralised sewerage management system.
- * The LG Act provides the legislative requirements to achieve a sustainable outcome.
- * The approval process is simplified for domestic systems by having system accreditation and guidelines in place for ease of assessment.
- * Systems that do not require accreditation or are outside the guidelines must submit more detailed information to allow Council to determine compliance with the requirements of the regulation.

4.0 Site and Soil Investigation

The LG Act empowers Council to approve all types of OSSMS such as domestic and commercial installations that meet the requirements of the LG Act and the LG Regulation.

The LG Regulation has performance criteria that all systems must meet which are outlined in Clause 29.

The majority of systems that Council approves are domestic in nature. To make it expedient to assess domestic systems the NSW Government has adopted a guideline known as "The Environmental Health Protection Guidelines - On Site Sewage Management for single Households". In addition Australian Standard 1547: 2000 references requirements for "On Site domestic Wastewater Management".

Both of these guidelines prescribe specific requirements for installation of a domestic system, which simplifies the process for the majority of applications submitted.

4.1 Site and Soil Investigation

Clause 26 of the Regulation outlines the information that must be submitted to Council when applying to have an OSSMS installed. The clause requires details of the actual system in addition to the physical site and soil conditions.

The manufacturer of the system is able to provide system details. The site and soil report is site specific and must address the ability of that site to adequately dispose of effluent. As such the report must be undertaken by a suitably qualified practising technician such as a geotechnical engineer or environmental health officer.

A generic site report outlining the required information is annexed in Appendix F.

4.2 High Risk Sites

If because of local site conditions the allotment poses a high risk to environmental amenity such as, but not limited to, flood, being located in the drinking water catchment, has extreme topographic limitations and the like the application is to:

- Demonstrate the measures incorporated in the system design to deal with the hydraulic load as the result of site constraints identified in the risk assessment such as limited allotment size.
- Demonstrate the measures incorporated in the system design to decrease nutrient output, namely total nitrogen and phosphorous of not more than 5mg/l as the result of site constraints identified in the risk assessment.
- Site-specific information by way of report on how the system can operate to a level that provides adequate health and amenity as well as having minimal effect on the environment given the site constraints.
- Detail of mitigative measures regarding protection of the system in the event of flood if the land is susceptible.
- Provide an additional assessment if the system is within the Wyong district water catchment. Appendix E outlines the additional matters for consideration.

4.3 Assessment of Commercial, Tourist and Agricultural Development and Residential Developments with Occupancies Greater Than 10 Persons

OSSMS proposed for commercial, tourist and agricultural development as well as residential developments with occupancies greater than 10 persons must produce effluent quality of at least a secondary standard.

A development application for development within these categories will require a report addressing the following heads of consideration:

- Outline the type and configuration of the system proposed for the development including tank capacities, the method of construction of tanks and the like.
- Provide information including calculations as to how the system will cater for the proposed loading. The information must reference hydraulic and solid capacities in the system design.
- Provide a water balance analysis for the site.
- Advise of the expected influent quality.
- Advise of the proposed outputs of the treated effluent prior to disposal in the LAA.
- Advise of any adverse chemical or biological inputs into the system and how the treatment device will process these inputs and achieve the accepted effluent quality.
- Demonstrate that the OSSMS meets the objectives of this DCP and related legislation.
- Provide a design including sizing calculations and construction methods regarding the LAA.
- Detail the mitigative measures proposed regarding protection of the system in the event of flood if the land is susceptible.
- Additional assessment is required if the system is within the Wyong district water catchment. Appendix E outlines the additional matters for consideration.
- Submit a report to indicate the feasibility of the site and soil to accept and dispose of effluent in the form outlined in Appendix F.

5.0 Installation, Operation and Maintenance

The requirements within this section do not replace the manufacturer's guidelines for installation, operation and maintenance of systems.

5.1 Installation

Once you have received the consent of Council you should make yourself aware of all requirements of the approval by looking over the stamped plans, details and specifications and by reading the conditions in the determination.

This letter prescribes the conditions that must be followed when installing and operating your OSSMS. In most cases the conditions imposed are standard pertaining to the particular system you have chosen, however, in some circumstances site and system specific conditions may be imposed. Council's standard conditions are outlined in Appendix G.

To determine compliance with these conditions Council's Environmental Health Officers must carry out various inspections during system installation and on completion of all works.

Prior to the system being used Council must issue an approval to operate the system. Council's On Site Sewage Management Strategy (1999) provides detail of this process.

5.2 Operation

To ensure that your new system performs to the designed standard there are a few basic rules to follow.

In short what you put into your system effects what comes out.

Therefore:

Don't:

- Place stain removers, nappy soakers, etc down your sink.
- Put any items such as condoms, nappies, sanitary napkins and the like into the system other than toilet paper.
- Put large quantities of bleach, or other foreign material into the system.
- Put oils and fats down the sink as they don't mix with water and will clog your system.
- Install a garbage grinder in your house.
- Use antiseptic such as medical and cleaning solutions as they will have the result their name suggests. They kill all the bacteria in your OSSMS.

Do:

- Use only disinfectants that state they are septic friendly.
- Avoid laundry detergents that contain high sodium content. Most laundry powder manufacturers use sodium as a bulking agent to give the appearance of value for money.
- Try using a phosphorous free laundry detergent. Products that are phosphorous free indicate this fact on their packaging.
- Use a sink strainer on your kitchen sink to stop food wastes from entering the system.

5.3 Maintenance

On completion of the installation of your OSSMS Council will issue an "Approval to Operate". This approval outlines the requirements that must be complied with throughout the life of your system. Like your approval to install, the Approval to Operate does this by imposing conditions pertinent to the type of system that you have.

A large part of operating an OSSMS is the general maintenance that must be undertaken and this is reflected in the conditions of approval.

For instance, you will be aware from the description given earlier in this DCP that an AWTS has a number of elements that allow it to operate. It is essential that regular checks be undertaken by suitably qualified personal to ensure that all parts of the system are operating to the optimum level. If you have an AWTS your approval to operate the system will require that this maintenance check be carried out every three months.

In addition to general servicing of OSSMS Council also carries out on the spot checks of selected systems according to the site's land category. As part of the audit program Council will take into consideration the location of the system and may require relocation at the time of upgrade. Council Officer's undertake 400 inspections per year as part of the audit program.

5.4 System Reporting

5.4.1 Conventional Septic Tank Systems

Conventional septic tank systems are not maintenance free. Solids levels will build up in septic tanks over a number of years and accordingly, these systems require regular “desludging”. The frequency of desludging is dependant upon the number of people using the system but generally systems will be required to be desludged every three to eight years. In addition, the in tank filter located in the outlet square of the system should be checked and cleared of any solid matter at periods of no longer than six months.

Council from time to time will require a report from a suitably qualified expert to detail the operating standard of the system and make recommendations to correct any system faults. This report shall address the following criteria:

- Tank size;
- Condition of internal baffle if installed;
- Condition of grease trap if installed;
- Height of tank above surrounding ground level;
- Condition of tank lid;
- Whether the lid and inspection openings in the lid are appropriately sealed;
- The state of repair of the tank;
- The condition of the inlet and outlet squares;
- The level of sludge in the tank;
- The level of scum in the tank;
- Whether there is evidence of effluent resurfacing on the site; and
- Whether there are odours present.

5.4.2 Aerated Wastewater Treatment Systems

AWTS are by nature of their design complicated and have the propensity to break down should they not be checked regularly to ensure that all aspects of the system are operating to the required standard. Subsequently, Council’s On Site Sewage Management Strategy and the system’s approval to install, requires that a quarterly maintenance regime be implemented.

The quarterly service is carried out by a Council approved service provider which includes the submission of a report.

The quarterly service report from your service provider must address the following criteria:

- Condition of internal baffle if installed;
- Condition of grease trap if installed;
- Height of tank above surrounding ground level;
- Condition of tank lid(s);
- Whether the lid and inspection openings in the lid are appropriately sealed;
- The state of repair of the tank;
- The condition of the inlet and outlet squares;
- The level of sludge in the tank;
- The level of scum in the tank;
- Operating standard of the pump;
- Operating standard of the blower;
- Operating standard of the electrical component;
- Operating standard of the alarms;
- Operating standard of the air lines;
- Operating standard of the clarifier;
- Whether the sludge return is operating;
- Operating standard of the chlorinator;
- Whether there are signs of effluent resurfacing on the site;
- Whether there are odours present;
- PH levels;
- Number of irrigation sprinklers;
- Operating standard of the irrigation sprinklers; and
- Whether effluent is running off the site.

5.4.3 Composting Toilets

Composting toilets are systems that require due diligence by the operator in so far as the material introduced to the composting chamber and the frequency in which the composted solids are removed and disposed of. From time to time Council requires that a report from a suitably qualified expert be submitted to Council on the operating standard of the system.

The report shall address the following criteria:

- Fan operation and maintenance;
- Filters to air intakes;
- Any heating elements;
- Any rotation or turning of the compost;
- Levels of composted material;
- Presence of flies or other disease transmitting insects within the composting chamber;
- That wastes have been allowed to compost for the period recommended for the type of unit;
- That the permanent construction notice is still affixed within the closet compartment;
- Any liquid discharge from the unit and accompanying disposal location; and
- The grey water disposal system including inspection of the disposal area.

5.4.4 Sand Filters

Like a septic tank and an AWTS, sand filters are not maintenance free. Although they form a different step in the treatment of effluent they are still subject to conditions that may cause them to fail. Supply to the filter is imperative to ensure proper operation. Accordingly, it is essential that the pump and supply manifolds are free of foreign matter and are working correctly.

Likewise, the sand bed must also be monitored to ensure that the applied effluent is evenly distributing over and through the sand.

The life of your sand filter and frequency of proper and effective maintenance is also dependant on the state of repair and effectiveness of the initial treatment system.

An assessment is to be undertaken on a 12 monthly basis and must include:

- The state of repair of the container housing the sand filter;
- Height of the sand filter above the surrounding ground level;
- Operating standard of the dosing pump;
- Operating standards of the electrical components;
- Operating standards of the alarms;
- Whether the return line to the treatment tank is operating;

- Whether there are odours present;
- Is the filter free of vegetation whether alive or dead; and
- Whether there are signs of effluent re-surfacing in the filter bed.

5.5 Council Auditing

Council has in place an auditing program. The program requires that from time to time Council will inspect your OSSMS. This inspection along with reports from your contractor will enable council to determine compliance with the approvals to install and operate your OSSMS. If it is found that your system does not comply with these approvals and current legislation, Council's orders process would then be followed. This form of action by Council is dependant on the severity of your systems departure from its operating standard.

A TYPICAL DOMESTIC-WASTEWATER FLOW DESIGN ALLOWANCES

Source	Typical wastewater flow allowance in L/person/day (see Note 1)	
	On-site roof water tank supply	Reticulated community or a bore-water supply
Households with standard fixtures (including automatic washing machine)	140	180
Households with standard water reduction fixtures (see Note 2)	115	145
Households with full water-reduction facilities (see Note 3)	80	110
Households with extra wastewater producing facilities	170	220
Households (black water only)	50	60
Households (grey water only)	90	120
Motels/hotels		
– guests, resident staff	140	180
– non-resident staff	30	40
– reception rooms	20	30
– bar trade (per customer)	20	25
– restaurant (per diner)	20	30
Community halls		
– banqueting	20	30
– meetings	10	15
Restaurants (per diner)		
– dinner	20	30
– lunch	15	25
Tea rooms (per customer)		
– without restroom facilities	10	15
– with restroom facilities	15	25
School (pupils plus staff)	30	40
Rural factories, shopping centres	30	50
Camping grounds		
– fully serviced	100	130
– recreation areas	50	65
NOTES:		
1 These flows are minimum rates unless actual flows from past experience can be demonstrated.		
2 Standard water-reduction fixtures include dual flush 11/5.5 litre water closets, shower-flow restrictors, aerator faucets (taps) and water-conserving automatic washing machines.		
3 Full water-reduction fixtures include the combined use of reduced flush 6/3 litre water closets, shower-flow restrictors, aerator faucets, front-load washing machines and flow/pressure control valves on all water-use outlets.		
4 The minimum number of people taken to reside in a dwelling is 5. Occupancy loading is calculated at the rate of 2 persons per bedroom.		

SOURCE: AS 1547:2000

B Data Sheets

B1 Data Sheet 1: Pulsating Pop Up Sprinklers

An impulse or pulsating popup sprinkler is a device that allows the dispersal of liquid, in this case effluent, over a predetermined area. They are different to the usual sprinkler type used to disperse effluent over the land application area in that they are buried with only the top most cover plate visible and their droplet size is greater. The major advantage of this sprinkler is that it is not susceptible to damage from maintenance of the LAA such as mowing grass and the like as the sprinkler body retracts into the housing located below ground when the supply pump is deactivated. The disadvantage is the increased buffer distances required to those environmentally sensitive features and buildings on or surrounding the LAA.

Sprinkler Type:

The type of sprinkler must be an Elgo 2688 or similar with a 3.5mm nozzle. A minimum of 4 sprinklers shall be installed.

Sprinkler Throw:

A maximum radius of 5 metres is to be set for all sprinklers.

Buffer Distances:

At least 20 metres shall be provided between the outer most point of the sprinkler radius and

- Any Dwelling on the site
- Any dwelling on adjoining properties. As such if pop ups are to be used the site analysis shall include details of improvements on adjoining properties.

At least 10 metres shall be provided between the outer most point of the sprinkler throw and any property boundary.

All other buffer distances will be as per the Environment and Health Protection Guidelines.

Coverage of Sprinkler:

75 % of the area of the sprinkler radius that has direct contact with the ground is taken to be the effective irrigation field. This being the case each sprinkler is taken to cover 78.5 metres square.

Duration of Sprinkler Discharge:

A water-rating device shall be installed such that all sprinklers shall discharge at an even rate at alternative cycles throughout the duration of the pumping out of the pump chamber of the AWTS.

Installation of Sprinklers:

As the sprinklers form part of the delivery system to dispose of effluent on site they will be required to be installed by a suitably qualified and licensed tradesman.

B2 Data Sheet 2: Wobbler Off Centre Rotary Action Sprinklers

A Wobbler off Centre Rotary Action sprinkler is a device that allows the dispersal of liquid, in this case effluent, over a predetermined area. They are different to the usual sprinkler type used to disperse effluent over the LAA and their droplet size is greater. The disadvantage is the increased buffer distances required to those environmentally sensitive features and buildings on or surrounding the LAA.

Sprinkler Type:

The type of sprinkler must be a Wobbler off Centre Rotary Action Sprinkler with a 2.78mm nozzle. A minimum of 4 sprinklers shall be installed.

Sprinkler Throw:

A maximum radius of 5 metres is to be set for all sprinklers.

Buffer Distances:

At least 20 metres shall be provided between the outer most point of the sprinkler radius and

- Any Dwelling on the site
- Any dwelling on adjoining properties. As such if pop ups are to be used the site analysis shall include details of improvements on adjoining properties.

At least 10 metres shall be provided between the outer most point of the sprinkler throw and any property boundary.

All other buffer distances will be as per the Environment and Health Protection Guidelines.

Coverage of Sprinkler:

75 % of the area of the sprinkler radius that has direct contact with the ground is taken to be the effective irrigation field. This being the case each sprinkler is taken to cover 78.5 metres square.

Duration of Sprinkler Discharge:

A water-rating device shall be installed such that all sprinklers shall discharge at an even rate at alternative cycles throughout the duration of the pumping out of the pump chamber of the AWTS.

Installation of Sprinklers:

As the sprinklers form part of the delivery system to dispose of effluent on site they will be required to be installed by a suitably qualified and licensed tradesman.

C SUITABLE VEGETATION FOR LAND APPLICATION AREAS

Botanical Name	Approx Height	Common Name or Variety
Trees		
<i>Acacia floribunda</i>	2 - 4 m	Gossamer Wattle
<i>Angophora floribunda</i>	Large tree	Rough Bark Apple Gum
<i>Callicoma serratifolia</i>	< 4 m	
<i>Casuarina glauca</i>	6 - 12 m	Swamp oak
<i>Elaeocarpus reticulatus</i>	Large tree	Blueberry ash
<i>Eucalyptus amplifolia</i>	Large tree	
<i>Eucalyptus botryoides (coastal areas)</i>	10 - 30	Bangalay
<i>Eucalyptus deanei</i>	Large tree	Blue Mountains blue gum
<i>Eucalyptus longifolia</i>	20 m	Woollybutt
<i>Eucalyptus pilularis</i>	30 - 40 m	Blackbutt
<i>Eucalyptus punctata</i>	< 35 m	Greygum
<i>Eucalyptus robusta</i>	20 - 30 m	Swamp mahogany
<i>Eucalyptus saligna (coastal)</i>	30 - 50 m	Sydney blue gum
<i>Eucalyptus tereticornis</i>	30 - 40 m	Forest red gum
<i>Acmena smithii</i>	10 - 20 m	Lilli pilli
<i>Hymenosporum flavuum</i>	3 - 6 m	Native frangipani
<i>Melaleuca armillaris (coastal)</i>	3 - 4 m	Bracelet honey myrtle
<i>Melaleuca decora</i>	4 - 7 m	
<i>Melaleuca ericifolia</i>	6 m	
<i>Melaleuca linariifolia</i>	4 - 8 m	Snow in summer
<i>Melaleuca quinquenervia</i>	5 - 7 m	Broad paperback
<i>Melaleuca stypheloides</i>	6 - 15 m	
<i>Melia azedarach</i>	15 - 20 m	
<i>Syzygium paniculatum</i>	8 - 10 m	Bush cherry
<i>Viminaria juncea</i>	2 - 3 m	Golden spray
<i>Sloanea australis</i>		Maidens Blush
<i>Cryptocarya glaucesceus</i>		
<i>Cryptocarya micronevra</i>		
<i>Endiandra sieberi</i>		
<i>Toona ciliata</i>		Red Cedar
<i>Acacia maidenii</i>		
<i>Acacia longifolia,</i>		
<i>Ficus rubignosa</i>		Port Jackson Fig
<i>Ficus coronata</i>		Sand-paper Fig
<i>Ficus macrophylla</i>		Moreton Bay Fig
<i>Rapanea howittiana</i>		
<i>Rapanea variables</i>		
<i>Rhodmanian rubesceus</i>		
<i>Syncarpia glomulifera</i>		Turpentine
<i>Tristoniopsis laurina</i>		Water Gum
<i>Alphitonia excelsa</i>		Red Ash

Botanical Name	Approx Height	Common Name or Variety
<i>Brachychiton acerifolius</i> <i>Livistona australis</i> <i>Archontophoenix cunninghamiana</i>		Flame tree Cabbage Tree Palm Bangalow Palm
Shrubs	1 – 2.5 m	
<i>Baekea linifolia</i>	< 4 m	
<i>Baekea virgata</i>	0.5 – 2 m	
<i>Banksia robur</i>	0.5 – 1.5 m	
<i>Bauera ruboides</i>	50 – 80 cm	Austraflora Firebrand
<i>Callistemon citrinus</i>	1 – 3 m	
<i>Callistemon linearis</i>	1.5 – 4 m	
<i>Callistemon pallidus</i>	3 – 7 m	
<i>Callistemon paludosus</i>	1 – 3 m	
<i>Callistemon pinifolius</i>	1.5 – 2.5 m	
<i>Callistemon rigidus</i>	3 – 10 cm	
<i>Callistemon salignus</i>	4 – 8 m	
<i>Callistemon shiresii</i>	1.5 – 2 m	
<i>Callistemon sieberi</i>	1 – 2 m	
<i>Callistemon subulatus</i>	1 – 1.5 m	
<i>Goodenia ovata</i>	1 – 2 m	Swamp hibiscus
<i>Hibiscus diversifolius</i>	1 – 2 m	
<i>Kunzea capitata</i>	< 2 m	Tea-tree
<i>Leptospermum flavescens</i>	1 m	Tea-tree
<i>Leptospermum juniperinum</i>	< 2 m	Tea-tree
<i>Leptospermum squarrosum</i>	1 – 2 m	
<i>Melaleuca squamea</i> <i>Melaleuca thymifolia</i>		
Grasses		
<i>Carex spp.</i>		
<i>Lomandra longifolia</i>		
<i>Microlaena stipoides</i>		
<i>Oplismenus imbecillis</i>		
<i>Poa lab</i>		
<i>Stipa spp.</i>		
Ground cover/climbers		
<i>Hibbertia scandens</i>	Climber	Snake vine Dusky coral pea
<i>Kennedia rubicunda</i>		
<i>Scaevola ramosissima</i>		
<i>Veronica plebeia</i>		Native violet
<i>Viola hederacea</i>		

Botanical Name	Approx Height	Common Name or Variety
Sedges/grasses/small plants		
<i>Baumea articulata</i>	Sedge	
<i>Baumea juncea</i>	Sedge	
<i>Baumea rubiginosa</i>	Sedge	
<i>Baumea teretifolia</i>	Sedge	Christmas Bell
<i>Blandfordia grandiflora</i>	30-90 cm	Christmas Bell
<i>Blandfordia nobilis</i>	30-90 cm	Native Daisy
<i>Brachyscome diversifolia</i>	Clump	
<i>Carex appressa</i>	Sedge	Swamp Lily
<i>Crinum pedunculatum</i>	< 2 m	Blue Flax Lily
<i>Dianella caerulea</i>	Low plant	Native Iris
<i>Gahnia</i> spp.	Tall Grass	Native Iris
<i>Juncus</i> spp.	0.5 m Rush	
<i>Patersonia fragilis</i>		
<i>Patersonia glabrata</i>		Rush Lily
<i>Restio Australia</i>	Reed	Tall Yellow Eye
<i>Restio tetraphyllus</i>	1 m	
<i>Sowerbaea juncea</i>	Sedge	
<i>Xyris operculata</i>	< 1 m	

D RISK ASSESSMENT FORM (SAMPLE ONLY)

RISK ASSESSMENT CATEGORIES (circle below, note U = Unknown)

Criteria	Low	Medium	High	Comment
Is the property on which the OSSMS proposed within the Wyong Shire Water Supply Catchment	No	No	Yes	
What is the size of property on which the OSSMS is to be installed (hectares) (1 hectare = 2.47 acres)?	Greater than 1	Between 1 and 0.5	Less than 0.5	
Is the proposed location of the OSSMS within a flood zone	Flood free	1 in 100 year flood zone	1 in 20 year floodzone	Not permitted below 1:100 in water catchment
Is the proposed location of the OSSMS within the recommended buffer distances of Table 5 of the Environment and Health Protection Guidelines, 1998 (extract below)	Complies	Does not comply <10% variation	Does not comply > 10% variation	
How many persons is the dwelling to which the OSSMS is connected, calculated to occupy	<8	>8 <10	>10	
What is the depth of the water table at the property?	< 1.5m	< 1.5m	< 1.0m	
Is the development Dual Occupation (i.e., both residences to one tank)?	No	Yes	Yes	
Risk Assessment Summary	HIGH 1	MEDIUM 3	LOW 5	

RECOMMENDED BUFFER DISTANCES FOR ON-SITE SYSTEMS
(from Table 5 Environment and Health Protection Guidelines, 1998)

System	Recommended Buffer Distances
All land application areas	<ul style="list-style-type: none"> • 100m to permanent surface waters (e.g. river, streams, lakes etc), • 250m to domestic groundwater well, • 40m to other waters (e.g. farm dams, intermittent waterways and drainage channels).
Surface spray irrigation	<ul style="list-style-type: none"> • 6m if area up-gradient and 3m if area, down gradient of driveways and property boundaries, • 15m to dwellings, • 3m to paths and walkways, • 6m to swimming pools.
Surface drip and trickle irrigation	<ul style="list-style-type: none"> • 6m if area up-gradient and 3m if area down gradient of swimming pools, property boundaries, driveways and buildings.
Subsurface irrigation	<ul style="list-style-type: none"> • 6m if area up-gradient and 3 m if area down gradient of swimming pools, property boundaries, driveways and buildings.
Absorption System	<ul style="list-style-type: none"> • 12m if area up-gradient and 6m if down gradient of property boundary • 6m if area up-gradient and 3m if area down gradient of swimming pools, driveways and buildings.

E WYONG SHIRE WATER SUPPLY CATCHMENT, ADDITIONAL MATTERS FOR CONSIDERATION

Prior to the determination of any application to install an OSSMS on land that is within the boundaries of the Wyong Shire Water Supply Catchment the applicant must address the following matters:

- 1) The effect of the proposed OSSMS on the water quality of rivers, creeks and groundwater in the catchment including periods of inclement weather.
- 2) What features have been designed into the OSSMS to ensure treated effluent does not leave the proposed LAA and enter the catchment.
- 3) The effect of the proposed OSSMS on the water cycle including pollutant loading and impacts on receiving waters.
- 4) The arrangements made to ensure that the system operates at a standard that will not detrimentally affect the sustainability of the catchment.
- 5) Systems below the 1:100 year flood level are not permitted in the Wyong water supply catchment.

F MODEL SITE REPORT

1. SITE EVALUATION	
Company _____	Names _____
Address _____ _____	
Phone _____	Fax: _____
Date of Assessment: _____	Signature of evaluator: _____ Date: _____

2. SITE INFORMATION	
Address/locality of site _____	Council area _____
Owner/developer: _____ _____	Phone: _____
Address: _____ _____	
Size/shape/layout Site plans attached Photograph attached	
	YES/NO
Intended water supply	Rainwater Reticulated water supply bore/groundwater
Expected wastewater quantity (litres/day)	
Local experience (information attached regarding on-site sewage management systems installed in the locality)	YES/NO
If any site or soil features have not been assessed, note why	

3. SITE ASSESSMENT	
Climate	
Are low temperatures expected (particularly below 15°C)?	YES/NO
Where appropriate:	
Rainfall water balance attached	YES/NO
Land application area calculation attached	YES/NO
Wet weather storage area calculation attached	YES/NO
Flood potential	
Land application area above 1 in 20 year flood level	YES/NO
Land application area above 1 in 100 year flood level	YES/NO
Electrical components above 1 in 100 year flood level	YES/NO
Residual Current Device (RCD) Installed	YES/NO
Exposure	
Slope	
Landform	
Run-on and seepage	
Erosion potential	
Site Drainage	
Fill	
Groundwater	
Horizontal distance to groundwater well used for domestic water supply (m)	
Relevant groundwater vulnerability map referred to?	YES/NO/NOT AVAILABLE
Level of Protection (I-VI)	
Bores in the area and their purpose:	
Buffer distances from wastewater Management system to:	
Permanent waters (m)	
Other waters (m)	
Other sensitive environments (m)	
Boundary of premises (m)	
Swimming pools (m)	
Buildings (m)	
Is there sufficient land area available for:	
Application system (including buffer distances)	
Reserve application system (including buffer distances)	
Surface rocks	

4. SOIL ASSESSMENT

Depth to bedrock or hardpan (m)

Depth to high soil watertable (m)

Hydraulic loading rate (where applicable)

Soil structure: _____

Soil texture: _____

Permeability category: _____

Other measures of soil permeability: _____

Hydraulic loading recommended for soil absorption system (mm/day): _____

Reasons for the hydraulic loading recommended: _____

Coarse fragments (%)

Bulk density (and texture) (g/cm³)

pH

Electrical conductivity (dS/m)

Exchangeable sodium percentage

Cation exchange capacity (cmol+/kg)

Phosphorus sorption index

Geology & soil landscape survey

Presence of discontinuities _____

Presence of fractured subsoil _____

Soil and Landscape map reference: _____

Dispersiveness

5. SYSTEM SELECTION

Consideration of connection to a centralised sewerage system.

Approximate distance to nearest feasible connection point: _____

Potential for future connection to centralised sewerage: _____

High/Med/Low

Potential for future connection to reticulated water: _____

High/Med

Low/already connected

Type of land application system considered best suited to site? _____

Why? _____

Type of treatment system considered best suited to site and application system?

Why? _____

6. GENERAL COMMENTS	YES	NO
Are there any specific environmental constraints?		
Is the system in a Wyong water catchment supply area?		
Are there any specific health constrains?		
Any other comments? <hr/> <hr/> <hr/> <hr/>		

G CONDITIONS OF INSTALLATION

The following conditions are examples only and other additional conditions may be imposed by Council

SEPTIC CONDITIONS

- 1 The plumbing, drainage and sewage management system must be installed by a licensed plumber and completed in accordance with the requirements of Australian Standard 3500.
- 2 The following inspections must be undertaken and approved by Council's Environmental Health Officer:
 - drains to the sewage management facility prior to backfilling;
 - the absorption trench after installation of tunnel trenching and prior to backfilling;
 - a final inspection prior to use of the sewage management facility.
- 3 The sewage management facility must not be less than 1.5 metres from any building and access for de-sludging is to be provided.
- 4 Vehicles and stock must be excluded from the application area. A barrier to protect the installation from vehicular and grazing stock damage may be required.
- 5 All stormwater and seepage from higher levels must be diverted from the application area by a diversion drain.
- 6 To conserve water, energy and prevent overload of the system, Council recommends the installation of flow control devices (eg AAA rated water efficient shower heads, restricted flow tap valves, aerators to outlet taps and spouts) to all fixtures.
- 7 Flushing cisterns must be fitted with dual flush 3/6 litre cisterns.
- 8 External overflows must be fitted to flushing cisterns connected to any WC pan to ensure leaking cisterns do not overload the sewage management system.
- 9 Depressions in the land application area are to be filled with absorbent soil, graded to a minimum of 1% crossfall on completion, and provided with "turf" and/or landscaped prior to occupation of the premises.
- 10 The land application area must be prepared by covering with at least 150mm of absorbent soil and ripped into the existing topsoil.
- 11 The sewage management facility must be installed, and the soil absorption system constructed to AS 1547-2000, where indicated on the approved plans, with the trenches parallel to the contour.
- 12 The minimum horizontal setback distance from the perimeter of the soil absorption system must be not less than:
 - 6.0 metres to a building at a higher elevation;
 - 12.0 metres to a building at a lower elevation;
 - 3.0 metres to a swimming pool, driveway and building at a higher elevation;
 - 6.0 metres to a swimming pool, driveway and building at a lower elevation.
- 13 The approved non-recreation application / irrigation areas must be turfed and/or landscaped to the satisfaction of Council before the system is used for irrigation. The application / irrigation area is to be defined so as to discourage the entry of persons undertaking their ordinary activities on the property with either perimeter landscaping, fencing and defined borders; or edging.

- 14 The minimum horizontal setback distance from the perimeter of the application must not be less than:
 - 100.0 metres to permanent surface waters (e.g. rivers, lakes, creeks, etc);
 - 40.0 metres to intermittent waterways and dams.
- 15 A copy of the Certificate of Compliance issued to the property owner must be forwarded to Council upon completion of the installation. The Certificate is to state that the accredited AWTS is commissioned in accordance with the specifications of the NSW Health Department.
- 16 A 100mm vent pipe is to be provided to the drainage system.
- 17 The invert level of the outlet from the treatment tank shall be not less than 150mm above the surface level of the disposal area.
- 18 An adequate supply of water sufficient to ensure the proper operation of the disposal system shall be made available at all times.
- 19 The treatment tank shall be at least 150mm above the surrounding ground surface. This surface shall be free draining.
- 20 If the effluent disposal system treats effluent from a newly constructed dwelling, the dwelling shall not be occupied until such time as Council has carried out a satisfactory final inspection of the installation.

SPRAY CONDITIONS

- 1 The plumbing, drainage and sewage management system must be installed by a licensed plumber and completed in accordance with the requirements of Australian Standard 3500.
- 2 The following inspections must be undertaken and approved by Council's Environmental Health Officer:
 - drains to the sewage management facility prior to backfilling;
 - a final inspection prior to use of the sewage management facility.
- 3 The sewage management facility must not be less than 1.5 metres from any building and access for de-sludging is to be provided.
- 4 Vehicles and stock must be excluded from the application area. A barrier to protect the installation from vehicular and grazing stock damage may be required.
- 5 All stormwater and seepage from higher levels must be diverted from the application area by a diversion drain.
- 6 To conserve water, energy and prevent overload of the system, Council recommends the installation of flow control devices (e.g. AAA rated water efficient shower heads, restricted flow tap valves, aerators to outlet taps and spouts) to all fixtures.
- 7 Flushing cisterns must be fitted with dual flush 3/6 litre cisterns.
- 8 External overflows must be fitted to flushing cisterns connected to any WC pan to ensure leaking cisterns do not overload the sewage management system.
- 9 Depressions in the land application area are to be filled with absorbent soil, graded to a minimum of 1% crossfall on completion, and provided with "turf" and/or landscaped prior to occupation of the premises.
- 10 The land application area must be prepared by covering with at least 150 mm of absorbent soil and ripped into the existing topsoil.

- 11 The minimum horizontal setback distance from the perimeter of the soil absorption system must be not less than:
- 6.0 metres to a building at a higher elevation;
 - 12.0 metres to a building at a lower elevation;
 - 3.0 metres to a swimming pool, driveway and building at a higher elevation;
 - 6.0 metres to a swimming pool, driveway and building at a lower elevation.
- 12 The approved non-recreation application / irrigation areas must be turfed and/or landscaped to the satisfaction of Council before the system is used for irrigation. The application / irrigation area is to be defined so as to discourage the entry of persons undertaking their ordinary activities on the property with either perimeter landscaping, fencing and defined borders; or edging.
- 13 The minimum horizontal setback distance from the perimeter of the application must not be less than:
- 100.0 metres to permanent surface waters (e.g. rivers, lakes, creeks, etc);
 - 40.0 metres to intermittent waterways and dams.
- 14 The distribution and irrigation lines must be buried to a minimum depth of 100mm. Standard household hose taps and garden fittings must not be connected to the distribution or irrigation lines.
- 15 Within or adjacent to the effluent application / irrigation area, there must be at least two warning signs that comply with AS 1319. The sign must be on a green background with black or white lettering at least 20mm high. The sign shall state:
- "RECLAIMED EFFLUENT DO NOT DRINK - AVOID CONTACT"*
- 16 A copy of the Certificate of Compliance issued to the property owner must be forwarded to Council upon completion of the installation. The Certificate is to state that the accredited AWTs is commissioned in accordance with the specifications of the NSW Health Department.
- 17 Surface and subsurface irrigation systems must be installed to comply with the manufacturer's specifications, including all filters, vacuum break valves and check valves. Subsurface irrigation systems must have a minimum 25mm flushing line that returns to the primary chamber of the treatment tank.
- 18 A 100mm vent pipe is to be provided to the drainage system.
- 19 The invert level of the outlet from the treatment tank shall be not less than 150mm above the surface level of the disposal area.
- 20 An adequate supply of water sufficient to ensure the proper operation of the disposal system shall be made available at all times.
- 21 The treatment tank shall be at least 150mm above the surrounding ground surface. This surface shall be free draining.
- 22 If the effluent disposal system treats effluent from a newly constructed dwelling, the dwelling shall not be occupied until such time as Council has carried out a satisfactory final inspection of the installation.
- 23 The effluent disposal sprinklers are to be in accordance with the "Environmental Health protection Guidelines On-Site Sewage Management for Single Dwellings".
- 24 The sprinkler heads are to be of a commercial irrigation grade.
- 25 Household garden type fittings are not permitted to be used in the disposal of effluent.

SUBSOIL CONDITIONS

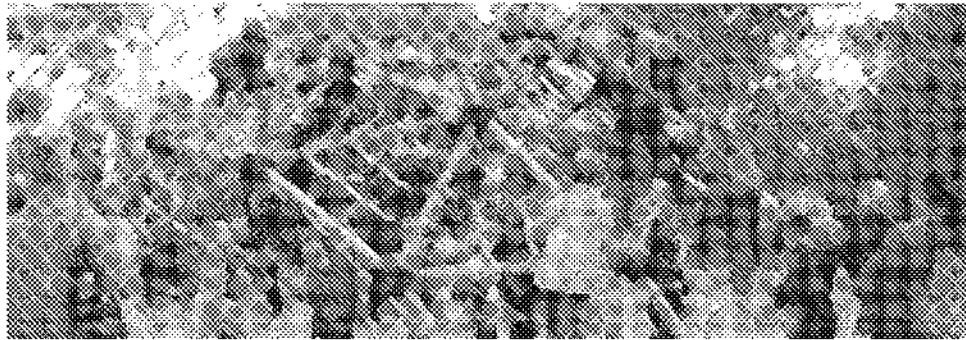
- 1 The plumbing, drainage and sewage management system must be installed by a licensed plumber and completed in accordance with the requirements of Australian Standard 3500.

- 2 The following inspections must be undertaken and approved by Council's Environmental Health Officer:
 - drains to the sewage management facility prior to backfilling;
 - a section of the subsurface disposal line after installation of tunnel trenching and prior to backfilling;
 - a final inspection prior to use of the sewage management facility.
- 3 The sewage management facility must not be less than 1.5 metres from any building and access for de-sludging is to be provided.
- 4 Vehicles and stock must be excluded from the application area. A barrier to protect the installation from vehicular and grazing stock damage may be required.
- 5 All stormwater and seepage from higher levels must be diverted from the application area by a diversion drain.
- 6 To conserve water, energy and prevent overload of the system, Council recommends the installation of flow control devices (e.g. AAA rated water efficient shower heads, restricted flow tap valves, aerators to outlet taps and spouts) to all fixtures.
- 7 Flushing cisterns must be fitted with dual flush 3/6 litre cisterns.
- 8 External overflows must be fitted to flushing cisterns connected to any WC pan to ensure leaking cisterns do not overload the sewage management system.
- 9 Depressions in the land application area are to be filled with absorbent soil, graded to a minimum of 1% crossfall on completion, and provided with "turf" and/or landscaped prior to occupation of the premises.
- 10 The land application area must be prepared by covering with at least 150mm of absorbent soil and ripped into the existing topsoil.
- 11 The sewage management facility must be installed, and the soil absorption system constructed to AS 1547-2000, where indicated on the approved plans, with the trenches parallel to the contour.
- 12 The minimum horizontal setback distance from the perimeter of the soil absorption system must be not less than:
 - 6.0 metres to a building at a higher elevation;
 - 12.0 metres to a building at a lower elevation;
 - 3.0 metres to a swimming pool, driveway and building at a higher elevation;
 - 6.0 metres to a swimming pool, driveway and building at a lower elevation.
- 13 The approved non-recreation application / irrigation areas must be turfed and/or landscaped to the satisfaction of Council before the system is used for irrigation. The application / irrigation area is to be defined so as to discourage the entry of persons undertaking their ordinary activities on the property with either perimeter landscaping, fencing and defined borders; or edging.
- 14 The minimum horizontal setback distance from the perimeter of the application must not be less than:
 - 100.0 metres to permanent surface waters (e.g. rivers, lakes, creeks, etc);
 - 40.0 metres to intermittent waterways and dams.
- 15 The distribution and irrigation lines must be buried to a minimum depth of 100mm. Standard household hose taps and garden fittings must not be connected to the distribution or irrigation lines.
- 16 A copy of the Certificate of Compliance issued to the property owner must be forwarded to Council upon completion of the installation. The Certificate is to state that the accredited AWTS is commissioned in accordance with the specifications of the NSW Health Department.

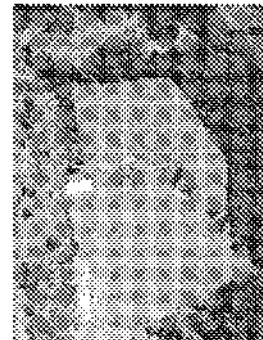
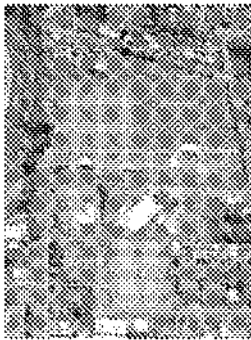
- 17 Surface and subsurface irrigation systems must be installed to comply with the manufacturer's specifications, including all filters, vacuum break valves and check valves. Subsurface irrigation systems must have a minimum 25mm flushing line that returns to the primary chamber of the treatment tank.
- 18 A 100mm vent pipe is to be provided to the drainage system.
- 19 The invert level of the outlet from the treatment tank shall be not less than 150mm above the surface level of the disposal area.
- 20 An adequate supply of water sufficient to ensure the proper operation of the disposal system shall be made available at all times.
- 21 The treatment tank shall be at least 150mm above the surrounding ground surface. This surface shall be free draining.
- 22 If the effluent disposal system treats effluent from a newly constructed dwelling, the dwelling shall not be occupied until such time as Council has carried out a satisfactory final inspection of the installation.
- 23 The disposal lines used in the discharge of effluent are to be marked with a purple stripe indicating "for use for the discharge of effluent", contain a bactocide to inhibit micro-organism growth, contain a herbicide to restrict plant intrusion and be of a pressure compensating type.

Wyong Recreation Facilities Strategy

Draft



Wyong Shire Council
Future Planning
August 2009



Draft Recreation Facilities Strategy

Introduction**Background**

This document has been prepared in a time of corporate change from the Management Plan to a Strategic Vision and Delivery Plan. Alignment with both these documents is discussed below.

The Management Plan of Wyong Council has a key objective for Leisure, Recreation and Open Space: "A community that has opportunities to pursue leisure time activities suitable to their age, interests and physical activities."

To achieve this objective the Management Plan for 2007/08 required the review of the Recreation Facilities Strategy with the first stage being a review of major sporting facilities delivered in 2008. In 2008/09 the Management Plan required the completion of Stage 2 of the Recreation Facilities Strategy, which this document represents.

This document collates parallel activities in recreation planning and presents the strategies for Recreation and Sporting Facilities which are based upon past and recent consultation and a comprehensive review of facilities.

There are parallel projects to develop a Shire Strategic Vision, The Four Year Delivery Plan, Strategic Asset Management Strategy, and Bicycle and Shared Pathway Strategy by Council. Where possible these have been used to prepare the Wyong Recreation Facilities Strategy and they will be used to review the document in two years from adoption.

This document is a complement to other projects to improve social engagement and community health. Properly planned, managed and programmed recreation and sporting facilities can make a major contribution to the social capital and health of the whole community.

In this document Recreation is considered to include both active and passive spheres and sporting facilities are encompassed within Recreation.

Relationship to the draft Shire Strategic Vision

The Strategy aligns with the draft Shire Strategic Vision priority objectives as discussed below.

Communities will be vibrant, caring and connected with a sense of belonging and pride in their local neighbourhood.

The Strategy emphasises actions and principles for facilities and settings that will promote social capital, community engagement and stronger connections.

There will be ease of travel within the Shire and to other regional centres. Travel will be available at all hours and be safe, clean and comfortable.

Travel has been a major issue in all recreation consultations over the past 20 years and much of this relates to the use of recreation facilities by the young and the elderly who use alternatives to cars as their primary form of transport.

The Strategy suggests planning principles, promotion and physical attributes that makes travel to facilities and settings safer, more efficient and easier. The Strategy promotes the integration of Recreation and incidental exercise.

Draft Recreation Facilities Strategy

Communities will have access to a diverse range of affordable and co-ordinated facilities, programs and services.

Consultation identified diversity, access and co-ordination as significant determinants of satisfaction. The community is also seeking programs and services to activate facilities. The Strategy suggests actions that will promote diversity, access and co-ordination of facilities and activate them with programs and services.

Areas of natural value in public and private ownership will be enhanced and retained a high level in the context of on-going development.

The exhibited Strategy implicitly supported this objective but has been amended to specifically promote this objective with a strategy to enhance natural values.

There will be a sense of community ownership of the natural environment through direct public involvement with environmental programs.

The Strategy promotes public involvement with environmental programs to achieve personal, social, health and environmental benefits for the individual and the community.

Goal and Objectives

Goal

The goal of the Wyong Recreation Facilities Strategy is to establish a flexible and efficient system of facilities to support healthy lifestyles and social engagement by facilitating community participation in recreation and sporting activities in Wyong Shire.

Objectives

- o *Improve Clarity of Decision Making.*
- o *Support and Develop the Recreation and Sporting Community.*
- o *Improve Programming and Activation of Facilities.*
- o *Protect and Improve Adaptability, Capacity and Sustainability of Facilities.*
- o *Plan for and Procure New Adaptable and Sustainable Facilities.*

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Strategic Targets

1 Improve Clarity of Decision Making

- 1.1 Demonstrate clear links between need and provision in planning:
- Utilise analysis of the sporting and general community profile and demands in decision making.
 - Use best practice engagement, consultation and communication about facilities and activities.
 - Use identified “number of users” and “duration of use necessary to complete competition and training” for each sport as criteria for access to facilities.
 - Prepare available time analysis of sports turf tested with Sports Associations as a planning tool.
 - Use identified need or participation trends to guide provision of new facilities.
 - Benchmark provision against areas of similar population, development type and age.
 - Use Sporting Organisation Strategic Planning.
 - Use Levels of Service of Facilities by Council to guide improvements and scoping of new facilities.
 - Use life cycle costing as criteria in planning for facilities.
- 1.2 Locate, develop, program and manage local sporting facilities to provide equitable distribution and access to all users:
- Give priority to co-location of sporting facilities with other community facilities to provide the greatest community benefit.
 - Give priority to co – location of recreation and sporting facilities with bicycle and shared pathways.
 - Provide equitable access to facilities to all ages of participants.
 - Consider alternative pricing strategies to promote equitable access to facilities for the whole community within given service levels.
- 1.3 Address Climate Change adaptation actions for Local Government recommended by the Commonwealth and State Governments including:
- Water sustainability for turf grass.
 - Shade provision and schedule changes to reduce solar / heat exposure.
 - Sports fields’ Management Strategy.
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Draft Recreation Facilities Strategy

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- Sea level rise in location of Surf Lifesaving Clubs and foreshore facilities.
 - Use planning, location and distribution strategies for facilities to minimise car dependence.
 - Promote and encourage car pooling for recreation and sports activities.
 - Develop and promote Transport Action Guides for all facilities, major “trip generators” first.
 - Support and encourage clubs to use technologies to communicate cancellations and venue changes to reduce unnecessary travel.
 - Ensure energy efficient building design when constructing new facilities.
- 1.4 Encourage appropriate use of specific sites using programs, management and maintenance:
- Program activities to encourage and develop recreation uses.
 - Implement agreed levels of service for facilities and sites.
 - Promote use of higher profile and capacity facilities to draw use away from local facilities and less developed areas.
 - Increase perceptions of safety and observation to encourage use.
- 1.5 Include all facilities into the Strategic Asset Management Strategy based upon the endorsed Level of Service for each facility. (Asset Management Strategy Open Space and Recreation):
- Assess improvements to existing facilities using a comparison of the estimated whole of life cost of the increase to the estimated value of the improvement to the capacity and level of service of the facility.
 - Use the Asset Management Plan for Open Space and Recreation to guide expenditure on the maintenance and renewal of existing facilities.
 - Plan and conduct a building audit of existing sports halls and surf club buildings to determine current value of halls and buildings and whole of life costs to maintain the agreed level of service.
 - Determine whole of life cost at specified levels of service as part of the project design brief for all new sporting facilities.
 - Develop systems to allow timely inclusion of new Sporting and Recreation Facilities into the Fixed Asset Register, the Asset Maintenance Systems and in the Management Plan of Council.
- 1.6 Use planning and compliance opportunities to support healthy lifestyle opportunities:
- Reference:
 - The NSW Premier’s Council for Active Living
 - National Heart Foundation’s Healthy by Design guidelines
 - NSW Police’s Safer by Design principles
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- Use the layout of subdivisions to promote local incidental exercise.
 - Audit existing and proposed facilities and paths to improve Accessibility.
 - Assess proposed public areas to promote social activity and access.
 - Locate paths and road crossings to remove activity barriers.
 - Plan and Design vehicle and bicycle parking for group visits to facilities.
- 1.7 Prepare specific Recreation and Sporting Facility Strategies to improve decision making.
- In consultation with the community prepare a priority list of improvements used to develop costed project descriptions suitable for grant applications as opportunities occur.
 - Complete the Bicycle and Shared Pathway Strategy to guide decisions on a network of facilities to support cycling, walking, running and other forms of movement to promote recreational and sporting opportunities and incidental exercise.
 - Prepare an Aquatic Facilities Strategy:
 - Plan a network of Aquatic Facilities with transparent whole of life costing.
 - Provide an agreed level of service and reduce risk to Council.
 - Establish a system of reporting to ensure sustainability of facilities.
 - Determine the future function and form of Wyong and Toukley Pool.
 - Review the current planned function of the Warnervale Aquatic Centre.
 - Identify catchment areas for Aquatic Facilities.
 - Prepare a revised Skate Park Strategy to guide decisions on the development and future programming of existing facilities and the place making of new facilities following the completion of the Youth Strategy.
 - Review performance of existing skate facilities.
 - Review existing skating facilities for potential to expand.
 - Prepare costed strategy for Skateparks.
 - In consultation with users and the community, prepare a plan for the future use of the San Remo Extreme Sports Park.
 - Prepare a Tennis Court Strategy:
 - Cost, seek funding and implement a program to provide commercially viable court operations to reduce maintenance and asset management costs in the long term.
 - Determine improved lease agreements.
 - Prepare a Commercial Use Strategy to co-ordinate the organised commercial use of Council recreation and sporting facilities.
 - Use the results of the study into Sports Tourism to assist in the planning of new sports facilities and the programming, upgrade and amplification of existing sites and precincts.
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2 Support the Recreation and Sporting Community

- 2.1 Improve public information about and facilities for healthy lifestyles and recreation facilities and activities:
- Prepare, promote and encourage use of an active lifestyles guide to Wyong Shire in map and internet form.
 - Provide information such as Active Lifestyles guide and Transport Access guides at public transport focal points such as stations and interchanges.
 - Commit resources to regular updating of Council information about facilities.
 - Prepare guides and assist in the planning and staging of events by groups.
 - Program and support events and activities to showcase the range of recreation settings in the Shire and to promote specific facilities.
 - Develop, support and promote programs for active lifestyles such as :
 - Walking.
 - Cycling.
 - Exercise and Fitness programs.
 - Land care and Dune care groups.
 - State Emergency Service.
 - Rural Fire Service.
 - Surf Life Saving Central Coast.
 - Dance and Performance in public spaces.
 - Active over 50's programs.
- 2.2 Develop and improve liaison with recreation and sporting facility stakeholders to support the community.
- Develop programs and innovative approaches to activating facilities and improve social connectedness, health and fitness.
 - Identify and develop opportunities for partnerships with the recreation and sporting community.
 - Develop the skills, knowledge and experience base of the Wyong Sporting Committee framework to represent the sporting community, provide advice and act to communicate Council's vision for sports to the sporting community.
 - Liaise with the Health Promotions Unit Department of Health to co-ordinate health outcomes from facilities.
 - Liaise with the NSW Department of Sport and Recreation to support facilities for training and support schemes for sporting administrators to better prepare them for the changing requirements made upon them.
 - Liaise with Gosford and Lake Macquarie City Councils to reduce duplication and achieve an equitable spread of facilities and activities.
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Draft Recreation Facilities Strategy

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- Continue to support and liaise with the Central Coast Academy of Sport.
 - Develop a liaison with the Central Coast Sports Federation.
- 2.3 Encourage, develop and facilitate recreation and sports volunteerism. Support facilities, resources and programs to develop opportunities for volunteers:
- Provide sports referees and umpires with adequate amenities in all upgraded and new sporting facilities.
 - Support opportunities for coaching and skills training programs within the Wyong sporting community.
 - Support recreation groups with better information and appropriate facilities.
 - Continue to resource volunteer environmental groups for recreation, social and environmental benefits to the community.
- 2.4 Plan and provide accessible recreation facilities equitably spread across the Shire.
- Engage and consult with potential users of accessible facilities.
 - Audit facilities for access compliance. Ensure all facilities have a minimum of two disabled spaces with accessible connection to facility.
 - Use Ranger patrols to monitor compliance with parking controls.
 - Use renewal as an opportunity to improve compliance.
 - Use new facilities as an opportunity to provide accessible facilities.
- 2.5 Support opportunities for commercially based sporting facilities that will:
- Provide a higher level of spectator opportunities.
 - Provide a higher level of coaching, training or playing facility.
 - Meet gaps in existing provision of facilities.
 - Provide quality facilities at an accessible cost.
 - Provide Sports Tourism opportunities.
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Draft Recreation Facilities Strategy

3 Protect and Improve Adaptability Capacity and Sustainability of Facilities

- 3.1 Protect future flexibility in development of recreation and sporting facilities. Ensure that the design and implementation of infrastructure improvements do not limit the flexible use of facilities.
- Perimeter lighting and infrastructure to allow flexible arrangements.
 - Adequate storage areas and change facilities in buildings to allow for multiple users.
 - Adequate parking to accommodate predicted use.
 - Secure adequate land area for fields to be in a multi purpose layout with parallel recreation facilities.
 - Provide end of trip facilities such as lockers and showers at public carpark and amenities facilities.
- 3.2 Protect the ability to fund facilities replacement and renewal to maintain an agreed level of use.
- Develop a long term strategy of investment for asset management.
 - Increase maintenance funding proportional to increases in capital works funding to protect the effective quality and capacity of new and redeveloped facilities.
- 3.3 Protect and enhance identified natural values
- Plan, construct, manage, maintain and program facilities to protect identified natural values.
 - Program activities to protect identified natural values.
 - Co-ordinate facilities to draw damaging recreational use from sensitive areas.
- 3.4 Protect existing assets from arson, graffiti and vandalism:
- Replacement program of flammable waste receptacles.
 - Construction changes to reduce vulnerabilities to fire damage.
 - Material selections to limit damage by graffiti and vandalism.

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- 3.5 Plan for and implement a program to upgrade existing settings and facilities that provide for parallel activities and promote incidental exercise and social interaction by the community such as:
- shared pathways,
 - exercise stations to paths,
 - bubblers,
 - seating and shade,
 - accessible parking,
 - community gardens
 - bicycle storage facilities.
- 3.6 Prepare and implement a program to upgrade and renew existing water edge facilities of ocean, beach and lake for water based activities to improve the capacity for use, access and sustainability:
- Upgrade and renew beach access and parking to improve accessibility of beach use.
 - Identify and upgrade beach observation points in a sustainable manner.
 - Identify and upgrade spectator facilities for surfing events to increase capacity of sites.
 - Upgrade and renew surf lifesaving and life guard facilities and access in a co-ordinated program for safer beach use.
 - Renew and upgrade launching and storage for still water activities on lakes and rivers:
 - fishing,
 - wake boarding and water skiing,
 - power boating and jet skiing,
 - sailing,
 - canoeing and kayaking ,
 - dragon boats
 - kite and sail boards,
 - swimming.
 - Renew and upgrade ocean water edge facilities to improve the capacity for use for the activities using them :
 - fishing,
 - power boating and jet skiing,
 - kite and sail boards,
 - sailing,
 - surfing,
 - canoeing and kayaking
 - diving,
 - swimming.
 - Develop a program of jetty and wall maintenance in consultation with authorities and stakeholders.
 - Plan and co-ordinate with maritime authorities for appropriate segregation of motor and wind and manual powered water craft.
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- 3.7 Complete the planned Recreation Facility Works to upgrade and renew existing areas in the Estuary Management Plan:
- Upgrade Recreation Facilities to existing shared pathways to encourage movement.
 - Upgrade and renew existing playgrounds and park facilities in high use lake foreshore areas.
 - Upgrade and renew boat access and parking facilities to existing boat ramps.
 - Use consultation and community art opportunities to engage local communities in the upgrade and renewal of sites.
- 3.8 Prepare a Plan to increase capacity of existing Indoor Facilities:
- Provide improvements to Tunkuwallin Indoor Sporting Facility and surrounds to create a facility that will serve the northern area of the Shire.
 - Plan to increase the capacity of the Bateau Bay Recreation Centre in the medium term to improve its commercial viability and ability to meet demand for Indoor sports.
 - Plan to increase the capacity of the Mingara Indoor Aquatic and Recreation Centre in the long term.
- 3.9 Seek ways to protect and increase the capacity of the existing sporting assets and surrounds.
- Continue to apply the Sports Grounds Management Strategy to the adaptive management of sporting facilities.
 - Identify opportunities to program training and competition in new ways that will increase the capacity of sporting facilities and especially sports turf to meet the sporting community's needs. Ensure that programming does not create barriers to existing users.
 - Reduce the load on sports turf for pre-season and training:
 - Enter into agreements with Sports Associations to promote alternative sites as dedicated pre-season and seasonal training sites for sports.
 - Identify opportunities to offset training on sports turf with use of existing parks and reserves.
 - Reconfigure sports turf for training to reduce repetitive demands on small areas and improving peripheral areas.
 - Undertake a comprehensive review of surrounds that represent potential development of turf grass, development of concept designs and reconnaissance environmental assessment of the designs. Initially focus on fields with larger areas of surrounds.
 - Identify deficiencies in the attraction and capacity of existing sporting facilities which receive little or no bookings for organised sport and prepare options to increase use.
 - Conduct a detailed assessment of the potential to use synthetic turf as a major opportunity to increase the potential time capacity of turf grass facilities either as a substitute training area to draw use away from natural turf or as a surface supporting competition:
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- Football.
 - Rugby.
 - Touch.
 - Oztag.
 - AFL.
 - Continue to retrofit synthetic “play over wickets” to improve the flexibility, safety and capacity of existing turf grass playing fields with cricket wickets located within turf grass playing fields:
 - AFL.
 - Football.
 - Cricket.
 - Continue Council programs for the installation and renewal of lighting, and drainage of existing facilities to maximise the potential capacity in the short to medium term and to protect the asset in the longer term:
 - Continue to implement the water sustainability program planned for sports fields.
 - Complete approved amplification works of major facilities
 - Complete the remediation of the Bateau Bay AFL Softball facility.
 - Complete the endorsed expansion of the Wyong Netball facility.
 - Complete the Wyong Regional Sporting Facility Masterplan.
 - Determine the future use of Tuggerah Oval as a community sports ground in relation to the future expansion of the Wyong Sewer Treatment Plant.
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4 Plan for and Procure New Facilities

- 4.1 Protect future opportunities for recreation and sporting development in areas of development in the longer term:
- Identify areas and open space requirements as part of the Wyong Shire Settlement Strategy.
 - Acquire a land bank for future recreation and sporting facilities to develop as population growth occurs and the development funding stream accumulates.
 - Re-examine Council's land holdings to determine future opportunities for recreation and sporting facilities in existing areas where population projections and participation predict an increase in age groups of primary users.
- 4.2 Plan and develop new facilities and public spaces as both attractors and generators of incidental exercise and parallel activities to promote social interaction across a range of ages:
- Community Gardens.
 - Youth spaces in public places.
 - Furniture and exercise opportunities for seniors.
 - Signage, shade, bike racks, water and toilets provided as attractors.
 - Accessible facilities and sites.
 - Linkages that support incidental exercise to access the sites.
 - Shared pathways and bike routes.
 - Public art integrated into public space and facilities.
- 4.3 Use the landscape of the Shire to encourage recreation and exercise:
- Plan for and implement our section of the Marie Byles Coastal Walk, linking Newcastle and Sydney via Lake Macquarie and the Central Coast.
 - Plan for better links to support the Great North Walk.
 - Plan for and develop new sustainable walking trails in Council's bushland estate:
 - Norah Head.
 - Mt Alison.
 - Glenning Valley.
 - Liaise with other sectors to provide opportunities for trails and walkways:
 - Pioneer Dairy Trust.
 - Energy Authorities.
 - Department of Sport and Recreation.
 - National Parks and Wildlife Service.
 - Department of Forestry.
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- 4.4 Provide new water edge facilities for recreation and sporting activities to improve the capacity and sustainability in consultation with stakeholders.
- Identify and plan for new beach observation and spectator facilities for surfing events where none exist.
 - Identify and plan for a new surf lifesaving facility in the north of the Shire.
 - Identify the need and location for new high capacity boat ramp facilities to replace inappropriate existing sites with low capacity.
- 4.5 Complete the planned new Recreation Facility Works in the Estuary Management Plan:
- Recreation and exercise facilities to new shared pathways to encourage movement.
 - Complete shared pathways and create new paths.
 - Use consultation and community art opportunities to engage local communities in development of new sites.
- 4.6 Plan to provide a hierarchy of playground facilities with an equitable distribution across the Shire:
- Large “all access” facilities to serve a range of ages with supporting facilities.
 - Local parks to serve age specific groups and provide social interaction.
 - Innovative alternatives to play equipment to promote imaginative and challenging play and other social activities.
- 4.7 Plan to provide a major youth and skating facility in the south and north of the Shire in the medium term suitable for competitive and promotional events:
- Review trends for potential activities that may be supported by youth spaces.
 - Provide public youth places that will support activities with increasing challenge by a range of ages.
- 4.8 Plan to provide an Indoor Sports Hall with spectator seating able to stage multi sport events at a high level in the Shire:
- Basketball.
 - Netball.
 - Futsal/Indoor Soccer.
 - Gymnastics.
- 4.9 Plan to provide an Indoor Aquatic and Recreation Centre to serve the north of the Shire:
- Aquatic leisure activity and competitive sport.
 - Programmed health and leisure activities and indoor sports.
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Draft Recreation Facilities Strategy

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- 4.10 Negotiate with providers to provide more access to other sector recreation and sporting facilities and settings:
- Service authorities buffer areas for joint ventures.
 - Department of Education and Training – Perfect and implement the use agreement for Sporting Facilities with the Department of Education and Training.
 - Turf Grass facilities:
 - Bateau Bay Primary.
 - Berkeley Vale Community High.
 - Gorokan High.
 - Northlakes High.
 - Tuggerah Lakes Secondary College.
 - Wadalba Community School.
 - Wyong Technology High.
 - Courts:
 - Wadalba Community School.
- 4.11 Seek other sector funding opportunities for capital development, management and programming of facilities:
- Government:
 - Federal.
 - State.
 - Government authorities e.g. Delta.
 - Private:
 - Licensed clubs.
 - Sporting Associations:
 - Cricket.
 - Baseball.
 - Tennis.
 - AFL.
- 4.12 Investigate opportunities to use the rehabilitation of Buttonderry Landfill to provide a significant commercial sporting facility which may be developed as a joint venture with a potential operator.
- 4.13 Investigate the opportunity for other sites to support recreation or sporting facilities:
- Pioneer Dairy and Tuggerah East.
 - Mardi freeway buffer.
 - Mannering Park Crown Land.
 - Warnervale Airport surrounds.
 - Warnervale Proposed Education Facility.
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- 4.14 Plan to provide sporting facilities to meet identified population growth where the upgrade of existing facilities will not be adequate:
- Baseball
 - AFL
 - Football
 - Cricket
 - Oztag / Touch
- 4.15 Plan to address the major issues still outstanding from the Suter Report May 2002:
- Cycling facility:
 - Criterium – opportunity Ourimbah District Sports Precinct.
 - Four Cross – Mountain bike and BMX opportunity San Remo X Park.
 - Motor Sport facility – opportunity Buttonderry Landfill end use.
 - Flexible turf grass with 4 senior football fields – opportunity Warnervale.
 - More turf grass fields – opportunities above.
 - Indoor competitive 50m aquatic facility – opportunity Warnervale.
- 4.16 Complete the high priority actions of the Local Parks Strategy committed in the adoption of Resolution 525 of Council in November 2008 to address deficiencies in all Social Plan Districts.
- 4.17 Continue to implement the Strategy for Sporting Facilities in Warnervale. Construct Woongarah, Hamlyn Terrace, and Warnervale Town Centre Sporting Facilities to provide sporting facilities in the area of maximum potential population growth.

DCP No.
14

Wyong Tree Management Development Control Plan

OBJECTIVES

The aims of this plan are:

- To provide a framework for the protection of trees and native vegetation in Wyong.
- To set out Council's requirements with respect to the management of trees and the removal of vegetation.

This Development Control Plan (DCP) may be amended from time to time by Council. Proposed amendments are required to be advertised and exhibited in draft form and any submissions received must be considered by Council before the amended plan is adopted. People using this DCP should ensure that they have the current copy of the plan, including any amendments. If in doubt, please check with Council's Customer Service Centre.

Adopted as per council resolution on:	
Effective:	
Certified in accordance with the Environmental Planning and Assessment Act 1979 and Regulations	General Manager: Dated:

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1.0 INTRODUCTION

1.1 Where does this DCP apply?

This DCP applies to all land within the Shire of Wyong except land zoned 1(f) Forestry zone and 8(a) National Parks zone.

1.2 What is the purpose of this DCP?

To protect and enhance the environmental amenity, special landscape characteristics, unique vegetation qualities and ecological values of the Shire.

1.3 What are the aims of this DCP?

- a To define Council's responsibilities and requirements with respect to the protection, retention and replacement of trees and native vegetation.
- b To ensure that proper consideration is given to trees and native vegetation in planning, designing and constructing development.
- c To minimise unnecessary injury to or destruction of trees and native vegetation.
- d To retain healthy individual trees of local amenity and aesthetic value.
- e To facilitate the removal of undesirable exotics, noxious weeds, dangerous trees and any other inappropriate plantings, and to replace these with suitable local indigenous species which will positively contribute to visual and environmental amenity and ecological sustainability.
- f To retain viable representative samples of native vegetation, which have an intact structure and complete floristics, wherever practicable.
- g To detail requirements for the submission of sufficient and relevant information by applicants.

1.4 How does this DCP relate to other Legislation?

1.4.1 Wyong Local Environmental Plan 1991

Section 74C of the Environmental Planning and Assessment Act 1979 (EP&A Act) and the EP&A Regulations 2000 require this DCP to be consistent with **Wyong Local Environmental Plan 1991** as amended. In the event of any inconsistency, the provisions of the LEP shall prevail.

1.4.2 Other Related Acts and State Environmental Planning Policies (SEPP'S)

Several other Acts and State Environmental Planning Policies (SEPP's) relate to tree removal and vegetation management. Most contain exemptions or alternative approval processes. In the event of there being a prior approval issued by a determining authority under any other Act or SEPP, further development consent for the same works under Wyong LEP 1991 or this DCP will not be required.

A list of related legislation is provided in Appendix 1 to this DCP. Where appropriate, exemptions from the need for consent as a result of the provisions of other legislation have been identified within the text of this DCP. If a proponent is intending to claim exemption, the provisions of the particular legislation or approval should be checked prior to work commencing.

1.4.3 Landscape and Vegetation Management Policies

The provisions of this DCP shall be used in conjunction with Council's **Landscape Policy**, which it complements by providing a statutory planning framework specifically directed at managing trees and native vegetation.

1.4.4 Other Development Control Plans (Historic)

In May 1992, Council resolved to prepare a draft DCP No 14 - Vegetation Management. The DCP was amended on several occasions following its adoption by Council. Any amendment approved by Council repealed the previous version and became DCP No 14.

In the event of an inconsistency, with any other DCP, this DCP shall prevail to the extent of the inconsistency.

1.5 Definitions used in this DCP

"approved structure" includes a dwelling, garage or swimming pool and means a structure which has been approved by Council or a Private Certifier under the Environmental Planning and Assessment Act, but does not include:-

- a A manufactured home, a moveable dwelling or associated structure or part of a manufactured home, a moveable dwelling or associated structure within the meaning of the Local Government Act; or
- b A temporary building within the meaning of the Environmental Planning and Assessment Regulation; or
- c A structure included in DCP 85 – Exempt Development.

"arboriculture" means cultivating and managing trees as individuals and in small groups for amenity purposes.

"bushland" means land on which there is vegetation which is either a remainder of the natural vegetation of the land or, if altered, is still representative of the structure and/or floristics of the natural vegetation.

"clearing" native vegetation means any one or more of the following:

- a Cutting down, felling, thinning, logging or removing native vegetation;
- b Killing, destroying, poisoning, ringbarking, uprooting or burning native vegetation;
- c Severing, topping or lopping branches, limbs, stems or trunks of native vegetation;
- d Substantially damaging or injuring native vegetation in any other way.

"Consulting Arborist" means an Australian Qualification Framework Level 5 arborist (AQF5)

"culturally significant tree" means trees which are significant features of the cultural landscape, and are listed under Schedule 7.2.5.

"dead tree" means a tree with no living vascular tissue.

"destroy" means any activity leading to the death, disfigurement or mutilation of a tree.

"dwelling" means a room or number of rooms occupied or used, or so constructed or adapted as to be capable of being occupied or used, as a separate domicile.

"exempt vegetation management works" means those works not requiring the consent of Council (as defined in Section 4 of this DCP).

"garage" means a class 10(a) building as defined by the Building Code of Australia.

"injury" means damage to a tree and includes:

- a Lopping and topping;
- b Poisoning, including applying herbicides and other plant toxic chemicals to a tree or spilling (including washing off or directing water contaminated by) oil, petroleum, paint, cement, mortar and the like onto the root zone;
- c Cutting and tearing of branches and roots that is not carried out in accordance with accepted arboricultural practices, does not qualify as "pruning" or is done for invalid reasons;
- d Ringbarking, scarring the bark when operating machinery, fixing objects (e.g. signs) by nails, staples or wire, using tree climbing spikes in healthy trees marked for retention (except for access to an injured tree worker) or fastening materials that circle and significantly restrict the normal vascular function of the trunk or branches;
- e Damaging a trees root zone by compaction or excavation, asphyxiation (including unauthorised filling or stockpiling of materials);
- f Underscrubbing, unless carried out by hand tools, such as brushcutters and the like.

"lopping" means cutting between branch unions or at internodes on young trees, (but does not refer to lopping solely for the purpose of feeding stock in an officially drought declared area).

"native vegetation" means any of the following types of indigenous vegetation:

- a Trees;
- b Understorey plants;
- c Groundcover;
- d Plants occurring in a wetland.

"non-urban zone" means all land identified by Wyong Local Environmental Plan 1991, as Rural, Open Space and Environmental Protection in Zone No.'s 1(a), 1(c), 1(d), 6(a), 6(b), 6(c), 7(a), 7(b), 7(c), 7(d), 7(e),7(f), 7(g) and 10(a).

"Property Vegetation Plan" (PVP) means a negotiated and agreed plan to clarify what can be done with native vegetation on a landholder's property. It gives certainty and long term security so that native vegetation can be better managed for both financial and environmental outcomes.

"prune or pruning" means the following activities as specified in Australian Standard AS 4373-1996, "Pruning of Amenity Trees":

- Crown maintenance pruning involving:
 - a General pruning;
 - b Thinning;
 - c Deadwooding;
 - d Selective pruning;

- e Formative pruning;
or Crown modification pruning involving:
- f Reduction pruning;
- g Crown lifting;
- h Pollarding;
- i Remedial pruning;
- j Line clearance.

"remnant tree or vegetation" means a native tree or any patch of native vegetation which remains in the landscape after removal of most or all of the native vegetation in the immediate vicinity.

"remove" means to cut down, take away or transplant a tree from its place of origin.

"swimming pool" means an excavation, structure or vessel:

- a that is capable of being filled with water to a depth of 300mm or more; and
- b that is solely or principally used, or that is designed, manufactured or adapted to be solely or principally used, for the purpose of swimming, wading, paddling or any other human aquatic activity;
- c and includes a spa pool, but does not include a spa bath, or anything situated within a bathroom.

"topping" means cutting away part or all of the tree canopy leaving a trunk and stubbed main branches.

"Trade Arborist" means an Australian Qualification Framework Level 3 arborist (AQF3)

"tree" means a perennial plant with at least one self-supporting woody or fibrous stem, being of any species whether indigenous, exotic or introduced which:

- a Is 3 metres or more in height; or
- b Has a trunk diameter of 75 mm or more measured at 1.4 metres above ground level; or
- c Has a trunk diameter of 75 mm or more measured at ground level where the tree is removed such that the trunk diameter at 1.4 m above ground level can no longer reasonably be measured; or
- d Is a cycad or mangrove that is indigenous to or is recorded by Council as having special significance in the area of Wyong, irrespective of its dimensions.

"Trunk" means the main stem of the tree, as distinguished from the branches and roots.

"undesirable species" means plants that are defined by section 7.1 as being undesirable due to their location or as having characteristics which may lead to poisoning, weed infestation, brittle and dangerous wood, excessive spread of roots or bushland invasion. (Refer to Section 7.1 of this DCP).

"urban zones" means land in Zone No.'s 2(a), 2(b), 2(c), 2(d), 2(e), 2(g), 3(a), 3(c), 3(d), 4(a), 4(b), 4(d), 4(e), 5(a), 5(b), 5(c) or 5(d).

"vegetation management plan" means a structured program adopted by the Council for the protection, maintenance, restoration and replacement of trees and native vegetation.

2.0 TREE REMOVAL

2.1 Application of this section

This Section specifies prohibited works, when development consent is required for the removal or injury of a tree (or trees), the information required to be lodged with an application to Council, the matters considered by Council when assessing an application and the process for a review of Council's determination.

2.2 What works are prohibited?

For other than **exempt vegetation management works**, the following works are prohibited:

- a **Tree injuries** as defined by this DCP;
- b **Unauthorised tree removals**, including the removal of trees **without specific Council consent** or without **Council's approval** for the erection of a building or carrying out of a development activity; and
- c **Clearing vegetation** on any land (except minor clearing in urban zones as specified in Clause 28(4) of LEP 1991- see Appendix 2) **without first obtaining a consent** from Council.

2.3 When is consent required for tree removal?

Generally, consent is required for all tree injury or removals. The exceptions being:

- a The removal of dead trees, except where trees provide habitat for species listed in Schedule 1 or 2 to the Threatened Species Conservation Act 1995 (refer to Clause 28(3)(g) in Appendix 2);
- b Tree works that are necessary to carry out an approved development or building works; and
- c Activities identified under Section 4 of this DCP. This includes works defined as Exempt Vegetation Management Works. E.g. the removal of trees within 3m of an approved structure, providing it is not of a species listed in section 7.2.2 or 7.2.5.
- d The flowchart within Section 4 (Figure 1) clarifies when consent is required for tree removal when located within 3m of an approved structure.

2.4 What are the requirements when making application for tree removal?

The following general information is **usually required to be submitted with an application.** However, the amount and level of detail required may vary depending on the circumstances applying:

- a The written consent of the owner of the land;
- b Details as to the reasons for the removal of the tree(s);

- c A description of existing trees and vegetation including the following -
 - i A plan of the site showing the location of the tree(s) to be removed, drainage and sewer mains, all buildings, paved areas and overhead power lines;
 - ii Species type (botanical names and common name if known);
 - iii Approximate height, canopy spread of individual trees (or groups of trees), and trunk diameter at 1.4 metres above ground;
- d A description, (as above), of **existing trees and native vegetation on adjoining land:**
 - i Within 3 metres of the site boundaries (including street trees);
 - ii Where the canopy of a tree overhangs the site boundaries; and
- e **Proposed landscape treatments** identifying:
 - i Trees and vegetation to be retained and to be protected;
 - ii Methods of retention and/or protection during the works;
 - iii Proposed new plantings (species, mature heights and spread);
 - iv Altered ground levels, including cut and fill details;
 - v Site drainage including siltation and erosion controls to be implemented where necessary;
 - vi Proposed horticultural details, including growing mediums, mulching and irrigation.

Note: Trees to be inspected should be identified on site with a ribbon or non-permanent marker.
- f Where the application will cause injury to a culturally significant tree, a report from a Consulting arborist, as specified within section 2.7.
- g The applicable fee.

2.5 Notification of applications

Council's DCP No. 70 - *Notification of Development Proposals* currently identifies that with certain exemptions, Council will notify adjoining owners of local development applications, inviting an opportunity for comment. In general, Tree Works Applications will not be notified. In circumstances where in Council's opinion an adjoining owner may be affected by a proposal relating to tree works or tree removal, Council may determine to notify that adjoining owner(s) in accordance with those provisions.

2.6 Tree removal considerations

Council does not generally support removal of trees listed by Council's Significant Species Schedule in Section 7.2 of this DCP.

In assessing whether or not to approve **removal or injury** of either a tree or small patches of remnant vegetation, Council will take into consideration the following matters:

- a Whether the tree has significant amenity or aesthetic value or is ecologically significant in the local or regional context, with emphasis on retaining species listed by Council's Significant Species Schedule in Section 7.2 of this DCP;
- b The condition, maturity and useful life expectancy of the tree or native vegetation with respect to the practicality of remedial actions. (In the case of trees claimed to be dangerous, Council will consider a report on the condition of a tree prepared by a Consulting arborist);

- c A report from a Consulting arborist, as specified in section 2.7, where the tree is culturally significant;
- d Whether the tree or remnant vegetation is affected by the provisions of any other Act, Regulation or State Environmental Planning Policy applying to the land (see Appendix 1);
- e The potential hazards to persons or property in the context of:
 - i The structural soundness of the particular tree; and/or
 - ii The characteristics and history of the particular species; and/or
 - iii Siting issues such as ground conditions, building proximity, etc. which may give rise to a hazardous situation; and/or
 - iv Ill health, such as allergies, where specific evidence is provided by an expert in the relevant medical field and a link between the ailment and the species is reasonably established; and/or
 - v Existing (or potential for) traffic hazard in proximity to a roadway, intersection or driveway, where pruning would be an insufficient remedy;
- f The demonstrated need for reasonable solar access to windows, openings of a building, solar appliances, clothes drying and outdoor living areas;
- g Whether a tree should be replaced by a more suitable species given its location or proximity to services such as overhead power lines, sewer or drainage pipes, or the like;
- h Whether an amenity tree no longer fulfils its original purpose in the landscape;
- i Whether the species' natural propagation method is likely to create a nuisance in the landscape (e.g. camphor laurel);
- j Whether the proposed work needs to be carried out by a suitably qualified and experienced person;
- k Whether appropriate additional or replacement planting has been or should be carried out;
- l The need for and suitability of soil erosion and siltation controls;
- m Whether permanent and/or temporary fencing or barriers are required prior to works commencing;
- n Whether a monetary bond is required to ensure protection of trees on-site and adjoining lands;
- o Whether a Section 94 contribution is required towards the replacement of plantings within the same catchment;
- p Whether the tree or trees provide habitat or is a significant component of the habitat of a species listed in Schedule 1 or 2 of the Threatened Species Conservation Act, (refer Schedule 7.2.2) and whether there is a need to assess the significance of the works in accordance with Section 5A of the Environmental Planning and Assessment Act;
- q Whether, prior to the felling of a tree, special measures should be in place to reduce the potential for injury or death of animals likely to inhabit the tree. (Such measures may include:
 - i Inspection of hollows and other potential sites on the tree;
 - ii Sectional dismantling;
 - iii Supervision of works by an arborist and/or a licensed wildlife carer or handler);

- r Whether a Vegetation Management Plan should be submitted for approval prior to removal of any trees.

Note: Provided that no significant hazard or other safety issues also apply, the following shall not generally be considered as valid reasons to remove a tree:

- i Leaf drop (into gutters and downpipes - pools, lawns and the like);
- ii To increase natural light;
- iii To improve street lighting of private property;
- iv To enhance views;
- v To reduce shade created by a tree;
- vi To reduce fruit, resin or bird droppings on cars;
- vii Minor lifting of driveways and paths by tree roots;
- viii To erect a fence;
- ix Bushfire hazard control which has not been verified by Council;
- x Potential damage to sewer mains unless supported by written expert advice and only where reasonable alternatives are not feasible (e.g. relocation or encasement of main).

2.7 Review of refused applications

s.82A of the Environmental Planning and Assessment Act (1979) provides that an applicant may request Council to review the determination of an application. This means that an application which has been refused by Council, or the conditions attached to an approved application, may be reconsidered under this section of the Act.

To seek reconsideration by Council, the following must be provided:

- a a letter requesting review of Council's decision, providing additional information and reasons as to why Council's decision should be altered;
- b the provision of satisfactory supporting evidence by an expert in the field of the grounds for refusal, for example, a Consulting Arborist or Structural Engineer;
- c a quote for the cost of the tree removal; and
- d the payment of the appropriate fee, as identified in Council's Management Plan.

The submission of the s.82A request does not guarantee that the proposed tree works will be approved. Assessment of the original application and additional information submitted under this section will be based on the merits of the proposal; therefore the original determination may be upheld.

2.8 Arborist's reports

Council requires a Consulting arborist to prepare an arborist's report. The minimum qualification is the **Australian Qualification Framework Level 5 (AQF5)**.

The arborist must consider the issues raised in the **Significant Tree Study of Bateau Bay East** and the **Wyangah Significant Tree Study** in preparing the report.

The following information is required to be included in the arborist's report:

- a Name, address, telephone number, qualifications and experience of the arborist carrying out the inspection and reporting;
- b Address of the site containing trees;
- c Who the report was prepared for, and aims of the report;
- d Methods and/or techniques used in the inspection;

- e A plan, to scale, accurately showing:
 - i Location of trees on the subject site and any adjoining trees which may be affected by the development. Trees identified on this plan should be numbered;
 - ii Optimum and minimum tree protection zones as recommended by the Consulting arborist;
 - iii Lot boundaries, dimensions and North point;
 - iv Proposed development including services, driveways, and any alteration to existing levels and drainage.

- f A table showing, for each tree to be injured:
 - i Number of the tree as indicated in the plan
 - ii Species name;
 - iii Age class;
 - iv Height;
 - v Trunk diameter at 1.4 metres;
 - vi Canopy spread;
 - vii Health and condition, and estimated useful life expectancy;

- g A discussion of other relevant information, including details of tree hollows for wildlife, tree structure/weaknesses, root form and distribution, pests and diseases and/or a Tree Hazard Assessment;

- h Supporting evidence such as photographs and laboratory results to confirm presence of soil pathogens or support soil assessment, where relevant;

- i Proposed replacement plantings, landscaping and soil remediation;

- j Tree protection measures and a post-construction tree maintenance program which can be used as conditions, should the application be approved;

- k Sources of information referred to in the report;

- l Any other relevant matters.

3.0 LAND CLEARING

3.1 Application of this section

This Section specifies when a consent is required for the clearing of land, the information required to be lodged with an application to Council, and the matters considered by Council when assessing an application.

3.2 When is a consent required for clearing?

Generally, clearing will only be permitted where it is ancillary to and necessary for allowing an approved use of the land.

Clearing remnant native vegetation or protected regrowth **on land outside urban zones** requires approval under the Native Vegetation Act, 2003 (NV Act) unless the clearing is a 'permitted activity'. There are six (6) types of 'permitted activity' defined under the NV Act, including activities permitted through approvals granted under other Acts.

Under the NV Act, the Hunter-Central Rivers Catchment Management Authority (CMA) can only approve the clearing of remnant vegetation or protected regrowth when the clearing will improve or maintain environmental outcomes. It is therefore important that these provisions be checked with the CMA and Council, prior to the commencement of any clearing activity.

A consent from Council is required for **any other clearing of land**, including the clearing of land of any size in urban zones (except the removal of dead trees, and the limited clearing of undergrowth, - refer to Clause 28(3)(g), (h) and (i) of LEP 1991 in Appendix 2).

Clearing works that are necessary to carry out an **approved** development or building works, do not require an additional consent and are defined as Exempt Vegetation Management Works under Section 4 of this DCP.

Section 4 also specifies other activities that are exempt from the need for a consent from Council, including the removal of "undesirable species".

3.3 What are the requirements when making an application for land clearing?

- a The following general information is usually required to be submitted with an application. However, the amount and level of detail required may vary depending on the circumstances applying:
 - i The written consent of the owner of the land;
 - ii A description of the existing trees and native vegetation on the site:
 - o Location plan including spot levels and/or contours to be generally at 2 metre intervals and at a scale of 1:200 for sites up to 1 hectare and 10 metre intervals and at a scale of 1:1,000 for sites of more than 1 hectare;
 - o The area to be cleared in hectares;

- Species (botanical names and common names if known) of individual trees, or the dominants in the case of woodland, forest or groups of trees (to be shown as clumps) and/or vegetation communities to be marked on the plan. A corresponding schedule shall be submitted for vegetation communities outlining structure and floristics (a plant list), identifying the dominants. Any endangered, vulnerable or locally significant plant species should be shown and in such cases an assessment of potential impacts undertaken as per Section 5A of the EP&A Act. A description of the survey methodology should also be provided;
 - Appropriate height and trunk diameter at 1.4 metres above ground (breast height) for individual trees, where applicable;
 - Approximate canopy spread of individual trees, groups of trees and vegetation communities to be marked on the plan;
 - A schedule, prepared by a Consulting Arborist, of individual trees and/or groups of trees, summarising useful life expectancy values with recommendations for removal, retention and/or rehabilitation. In the case of vegetation communities, the schedule should summarise the condition, maturity, intactness and rarity, with recommendations for removal, retention and/or rehabilitation;
 - A method statement detailing the intended approach to the undertaking of the recommended works;
 - Plans shall identify site boundaries, dimensions, orientation (north point), the location of relevant land use zones and site areas of the whole of the land and that area proposed to be cleared in hectares or square metres;
- iii A brief description on the plans of **existing trees and native vegetation on adjoining land** showing:
- Trees, groups of trees and vegetation communities within 20 metres of the site boundaries;
 - The location of trees whose canopy overhangs the site boundaries;

Note: The development shall not involve works (e.g. roads, driveways, installation of services, cut and fill, drainage works, installation of barriers to natural drainage) that destabilise, disfigure or ultimately destroy any other trees and native vegetation on adjoining or downstream public or private land.

- iv The **reasons for and purpose of** the proposed **clearing**;
- v **Trees and vegetation to be retained**, including the purposes of such retention, such as semi-natural open spaces, buffer and exclusion zones, filter/protection and/or riparian habitat strips;
- vi **Details for protecting remnant trees and vegetation from damage** during clearing works, construction and on completion. This should include site preparation and location of protective fences, in accordance with the methods set out by the Design, Maintenance and Construction Guidelines in Council's DCP 67: Engineering Requirements for Development;
- vii **Soil report and altered ground levels**, including soil landscape and profile descriptions, cut and fill, regrading, changes to the soil profile or future growing mediums, fill material, if applicable, and necessary amelioration works required for horticultural purposes;

- viii **Drainage details** including any natural watercourses or drainage structures, proposed works involving alteration to hydrology, such as ground surface treatments (e.g. paving, accessways, introduction of roads, bund walls, dams or trunk drainage works);
 - ix **Erosion and sediment controls**, including a programme and species list for stabilising disturbed areas and soil stockpiling measures that shall be compatible with vegetation retention measures;
 - x **Utility installations** (underground and overhead lines) where known. Final locations and installation works to be consistent with vegetation retention proposals and the Design, Maintenance and Construction Guidelines in Council's DCP 67: Engineering Requirements for Development;
 - xi **Proposed new plantings** (species, mature heights and spread) establishment and maintenance details. The level of detail shall be sufficient to assess the adequacy of vegetation retention and future landscape proposals. For large scale landscaping proposals, reference should be made to Council's Landscape Policy and the need for landscape Assessment and Design reports;
 - xii **Location of future buildings** where known and applicable;
 - xiii The **proposed method of clearing**, including size and type of any machinery to be used. Final details to comply with Council's DCP 67: Engineering Requirements for Development;
 - xiv Proposed means for disposal of cleared materials. In this regard, sale of millable timber, chipping or tub grinding of plant materials for re-use onsite as mulch to protect and rehabilitate retained vegetation are the preferred methods;
- b In addition to the information required by clause (a) above, applications for clearing in **non-urban zones** shall also submit the following:
- i All existing and proposed property improvements including fences, dams, structures, services, service easements, roads, tracks, buildings, outbuildings, stockyards, grazing or cultivated areas, other cleared areas, etc;
 - ii All existing land features including identification of slopes in excess of 18 degrees, rock outcrops, ridges, drainage lines, gullies, erosion areas;
 - iii Where the application is for the purpose of agriculture, a description of the land's suitability for its intended use may be required together with supporting comments from the New South Wales Department of Primary Industries;
- c In addition to the information required by clauses (a) and (b) above, applications for **subdivisions** which involve clearing shall also show that the subdivision is designed to maximise retention of species present which are listed in Council's Significant Species Schedule at Section 7.2 of this DCP.

3.4 Clearing considerations

In assessing applications involving the clearing of land, Council will consider the following matters:

- a The objectives of the land use zone(s) applying to the land. Council will not permit any clearing to be carried out as an activity in itself for an unspecified end-use. Clearing will only be allowed where it is necessary to enable an approved use of the land.

- b Whether any species present are listed in Council's Significant Species Schedule at Section 7.2 of this DCP. If so, what measures are needed for their conservation, including on-site protection during and after construction and/or the taking of plant material for propagation.
- c The condition, maturity and useful life expectancy of remnant trees and native vegetation to be retained.
- d Impacts on scenic and visual amenity.
- e Effects on natural ecosystems, wildlife, wildlife habitats and whether fauna needs protection or, if appropriate, relocation.
- f The need for bushfire hazard reduction and the effects of this on remaining vegetation. This includes hazard reduction on adjoining land.
- g Whether permanent mitigation measures (such as bund walls, catch drains and stilling ponds) to contain nutrient flows and minimise weed spread need to be installed e.g. in non-urban zones or on sites adjoining remnant bushland or semi-natural open spaces.
- h Whether the proposed means of clearing is appropriate with respect to the soil type, species of understorey or the trees to be retained.
- i The adequacy and appropriateness of siltation and erosion controls during and after construction. In this regard, turf grasses are generally unsuitable in Conservation or other non-urban zones, particularly along or near natural watercourses and remnant bushland.
- j The need for retaining vegetation by providing:
 - i Buffer zones as screening to roads or for the protection of identified core habitats, wetlands, littoral and other rainforests;
 - ii Filter and protection strips to natural drainage lines, watercourses, streams, foreshores or constructed drainage corridors;
 - iii Riparian (watercourse) habitat strips;
 - iv Wildlife and other "green" corridors connecting remnant patches of vegetation; and
 - v Exclusion zones for preserving vulnerable and/or significant remnant vegetation and species.
- k The need to install temporary tree/vegetation protection measures prior to clearing works.
- l Whether the proposed method for disposing of cleared materials is appropriate. Any useful timber should be retrieved. Recycling of waste vegetation for fuel, logs, or as chip or grindings is mandatory. The use of wood chips and tub grindings for on site mulching or seedbed regeneration is encouraged.
- m The need for periodic or full time supervision of clearing works to protect environmental values or oversee relocation of native animals.
- n The need to rehabilitate any tree or vegetation adversely affected by clearing or construction works.
- o The need to select and plant new trees as replacement for trees cleared.

- p The effect of the development on the viability and quality of the bushland and, in particular, the likelihood of soil erosion, siltation of streams, wetlands and other waterbodies, direct or indirect alterations to drainage patterns and to fire hazard reduction regimes, the spread of weeds, undesirable and exotic species in the bushland, rubbish dumping and incursion by domestic or feral animals.
- q The effectiveness of measures proposed to mitigate any identified adverse impacts.
- r Any comments made by a public authority including, where appropriate, the Departments of Natural Resources, Primary Industries, and Environment and Conservation.
- s Whether the vegetation is affected by the provisions of any other Act, Regulation or State Environmental Planning Policy applying to the land (See Appendix 1 of this DCP).
- t Whether the tree or trees provide habitat or is a significant component of the habitat of a species listed in Schedule 1 or 2 of the Threatened Species Conservation Act (see s7.2.2), and whether there is a need to assess the significance of the works in accordance with Section 5A of the Environmental Planning and Assessment Act.
- u Whether a Vegetation Management Plan prepared by a suitably qualified person and detailing procedures and specifications necessary to address any issues of concern, should be submitted for approval prior to commencement of clearing works.

3.5 Noxious weed removal considerations

In issuing a **formal notice under the Noxious Weeds Act 1993**, in response to an owner's request, Council will consider:

- a The suitability of the selected method given its likely harm to trees and other native vegetation; and
- b Whether rehabilitation or replacement of existing vegetation should be ensured by submission of a satisfactory Vegetation Management Plan before starting work; and
- c Whether the proposed work is of such an extent as to require a more detailed assessment and therefore requiring the lodgement of a development application to ensure compliance with the Local Environmental Plan. (That is, works likely to affect a significant area of land, or of an intensity likely to cause direct harm to the environment or vegetation in the vicinity).

Note: Compliance with this provision shall not be taken as implying the granting of an exemption under the Native Vegetation Act 2003.

4.0 EXEMPTIONS

4.1 Works which do not need consent

Clause 28(3) of Council's LEP 1991 provides that the following works do not require consent from Council:

- a The removal or trimming of trees in accordance with the **Electricity Supply (Safety Plans) Regulation 1997 and the Electricity (Tree Preservation) Regulation 1995**; or
- b The removal or trimming of trees in accordance with clauses 88, 107, 138 and 139 of the **Roads Act 1993**; or
- c The removal or harvesting of trees grown commercially or domestically for their edible fruit; or
- d The removal of noxious weeds within the meaning of the **Noxious Weeds Act 1993** as identified in s.7.1.3. If the weed is identified as a Class 1, 2 or 5 weed, Council must be notified within 3 days of discovery of the weed. Class 3 & 4 weeds may be removed without any further action; or
- e The removal of commercially grown plantation trees in accordance with the **Harvest Guarantee Act 1995**; or
- f The removal or clearing of native vegetation authorised (but not exempt) under the **Native Vegetation Act 2003**, any other related Act or environmental planning instruments; or
- g **The removal of dead trees**, except where the trees provide habitat for species listed in Schedule 1 or 2 to the **Threatened Species Conservation Act 1995**; or

Note: Where the tree or trees provide habitat for animal species listed in Schedule 1 or 2 of the Threatened Species Conservation Act 1995, expert advice should be obtained in relation to relocation prior to removal of the tree - Refer to Appendix 3).

- h The removal of native vegetation in any zone **for the purposes of creating or maintaining landscaped and lawn areas** where:
 - i The work does not involve the removal, injury or destruction of trees; and
 - ii The area to be cleared is within the curtilage of an approved dwelling and is less than 1,000 square metres in total area; and
 - iii The slope of the land is not in excess of 18 degrees; and
 - iv The work does not involve the disturbance of native vegetation which is habitat for species listed in Schedule 1 or 2 to the Threatened Species Conservation Act 1995.
- i **The clearing of native vegetation within urban zones** where:
 - i The work does not involve the removal, injury or damaging of trees;
 - ii The allotment of land upon which the work is proposed has an area of less than 1,000m²;
 - iii The slope of the land is not in excess of 18°; and

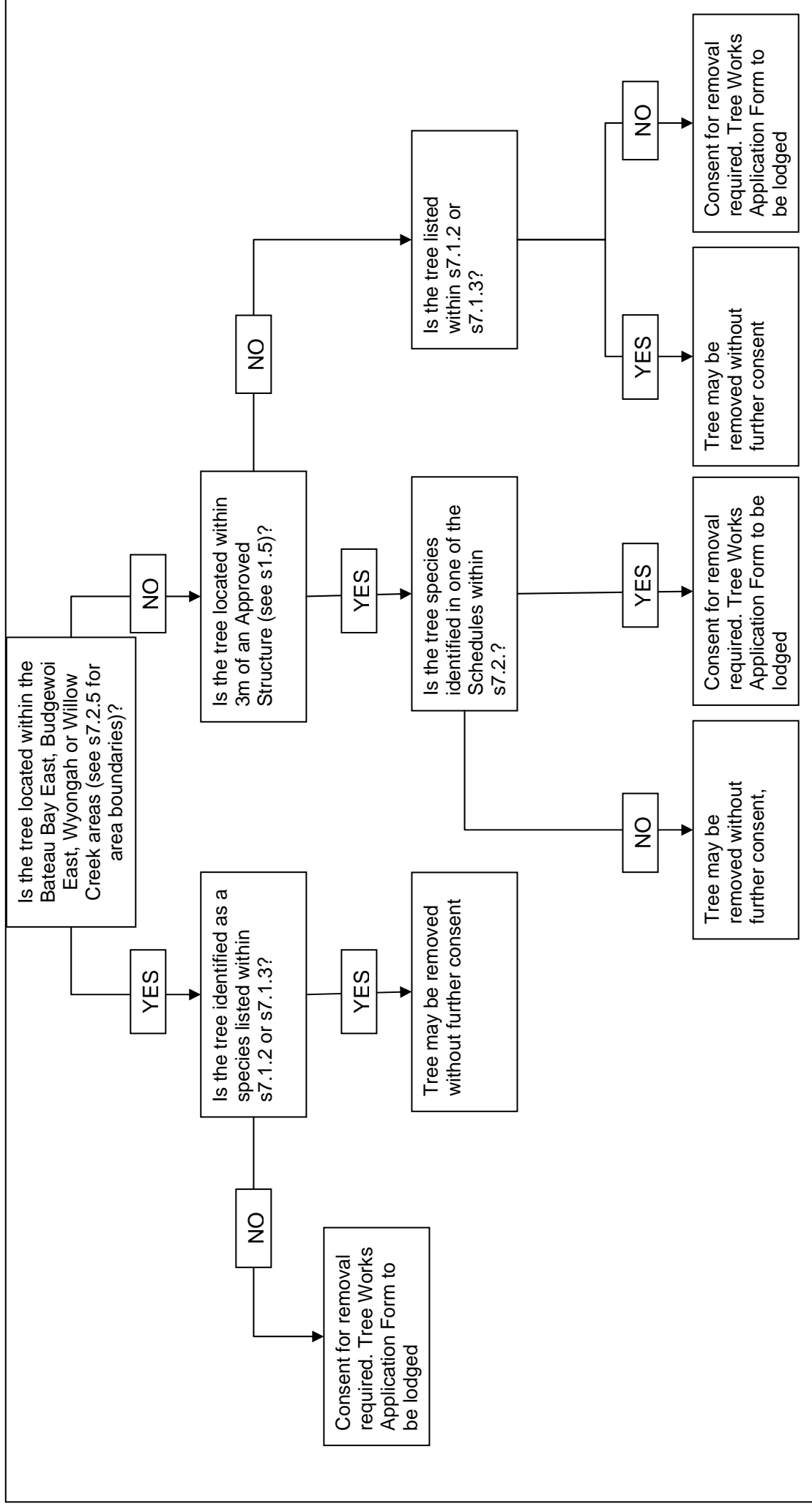
- iv The work does not involve the disturbance of native vegetation known to be habitat for plant and animal species listed in Schedule 1 and 2 to the Threatened Species Conservation Act 1995.
- j The following additional tree works are defined as **Exempt Vegetation Management Works** and do not require a consent from Council:
 - i **Pruning** as defined by this DCP; or
 - ii **Removal of trees to give effect to a development in accordance with a consent.** That is, the removal of trees and vegetation located within the alignment of a proposed road or service easement (in accordance with approved engineering plans) or within a proposed building footprint and up to 3 metres from the external walls of buildings (on the same land parcel), **provided that:**
 - o The building or work is the subject of a current development approval and the trees are not shown as intended to be retained; and
 - o Tree removal/ clearing procedures are in accordance with the Tree Design, Maintenance and Construction Guidelines within Council's DCP 67 - Engineering Requirements for Development; or
 - iii **Removal of any tree**, that in the opinion of Council, is dangerous, only where the tree's **instability is obvious** and there is **immediate danger and/or hazard**, for example, structurally split trunks, trees or limbs, felled by storms, that are damaging buildings or blocking accessways, or

Note: If appropriate, the branch removal option should be adopted in preference to complete tree removal.

- iv **Immediate removal of trees** or native vegetation where this is **essential for emergency access or emergency works** by Council or a public authority; or
- v Removal of a tree(s) which is a **bushfire hazard** where:
 - o The action is reasonably necessary to protect human life, buildings or other property from **imminent danger of a bushfire** burning in the vicinity of the tree; or
 - o Council has authorised its removal as part of a **bush fire risk management plan adopted** pursuant to the Rural Fires Act 1997; or
- vi **Removal of “undesirable species”**, which **may** include the removal of certain tree species within 3m of an approved structure (refer s7.1).

Note: Figure 1, on the following page, is a flowchart clarifying when consent is required to enable tree removal when the tree is located within 3m of an approved structure (s7.1.1).

Figure 1 WHEN IS CONSENT REQUIRED FOR TREE REMOVAL WITHIN 3 METRES OF AN APPROVED STRUCTURE?



Undesirable species identified in s.7.1.2 and s.7.1.3 may be removed without consent **provided that:**

- The vegetation is confirmed as an undesirable species listed in s.7.1.2 or s.7.1.3 by Council or by a person qualified in plant identification; and
- Where there is substantial clearing of the land involved, there is replacement planting of suitable native species. Such plantings are to be appropriately maintained to ensure their establishment; and
- Where there is substantial clearing on erodible soils or slopes in excess of 18 degrees, appropriate soil retention methods are employed to minimise the potential for erosion to occur and control runoff from the site; or

Note: To ensure complete control/removal of undesirable plant species, bush regeneration techniques should be adopted in preference to mechanical clearing.

- vii Removal of vegetation within 0.5 metres of the boundary between properties for the purpose of enabling survey to be carried out along that boundary by a registered surveyor, provided that the surveyed land exceeds one hectare in area and no alternative survey method is feasible.

Note: The removal or disturbance of an Aboriginal relic is an offence under the National Parks and Wildlife Act 1974. A tree believed to be, or in the vicinity of, an Aboriginal relic should be examined by an appropriately qualified person and instruction taken before any work commences.

4.2 Provide evidence for dangerous trees

Except for specified emergency situations, **expert advice should always be obtained** with respect to dangerous trees to confirm their condition and to ensure that they do not provide habitat for protected species. Otherwise, their cutting or removal might be in breach of the Environmental Planning and Assessment Act.

Where a dangerous tree is removed (in an emergency situation) due to obvious instability or hazard, (e.g. following storm damage), it is recommended that **evidence of the tree's condition should be retained** for a period of at least six (6) months after the event and produced at Council's request if needed. Such evidence might include:

- Photographs of the tree, and
- A report by a Consulting arborist, or
- A written statement from the State Emergency Service, if the Service carried out the emergency tree works at the owner's request.

Note: Where trees have died, been removed by storm damage or removed as undesirable species, replacement trees of a suitable native species should be planted to maintain tree cover within the Shire.

5.0 VEGETATION MANAGEMENT PLANS

5.1 What is a vegetation management plan?

- a A **Vegetation Management Plan** (VMP) comprehensively addresses protection, maintenance, rehabilitation, removal and/or replanting of trees and vegetation on a particular site. A VMP is similar (on a smaller scale) to a Property Vegetation Plan (PVP) as required for rural landholdings under the Native Vegetation Act, 2003.
- b A VMP must be **prepared by a suitably qualified and experienced person**.
- c Council may grant **development consent** for a VMP **for implementation over a period of 2 to 5 years**, depending on the scope and complexity of the programme and the size of the site. No further consents are required where works comply with an approved VMP.

5.2 When is a vegetation management plan required?

- a A VMP will be required when Council is of the opinion that the proposed tree works are of a type needing a comprehensive site-specific plan of management. The VMP will provide analysis and a strategy to address issues relating to the staging of works, cumulative impact, long term vegetation monitoring and management of progressive tree works for the same site over an extended period of time.
- b Submission of a **VMP is preferred to the making of separate successive applications** for works on/or removal of individual trees for the same site.

5.3 What information is required in a vegetation management plan?

In addition to the general information required to be submitted with an application for clearing of land (refer Section 3.3 of this DCP), the following specific information is also required to be included in a Vegetation Management Plan:

- a An overall site plan at an appropriate scale, showing the location of the proposed works, including staging information.
- b A detailed Vegetation Management Plan Report identifying:
 - i The works involved and the methodology for the undertaking of such works;
 - ii The likely impacts as a result of such works both within and external to the site; and,
 - iii The proposed measures to mitigate against the impacts that will occur. This should include a works program and specification detailing the timely implementation of mitigating measures corresponding with the staging of works.

6 0 PENALTIES

6.1 Public land

Pursuant to Section 629 of the Local Government Act 1993, an **on-the-spot fine of \$2,200** applies to the injury, or unnecessary disturbance of trees and native vegetation on public land including road reserves. A person who, without lawful excuse, removes or destroys any plant or animal from a public place, is guilty of an offence under the Act. Maximum penalty per offence is 20 penalty units.

6.2 Private land

Offences against the provisions of Wyong Local Environmental Plan 1991, namely the unauthorised injury, removal or destruction of trees or clearing of native vegetation, **can be prosecuted** under the provisions of the Environmental Planning and Assessment Act 1979. In addition to fines (up to the equivalent of 1000 penalty points), the offender may also be required to rehabilitate the site, plant new trees and native vegetation and maintain these until maturity.

7 0 SPECIES LISTS

7.1 Undesirable species

7.1.1 Plants with Undesirable Characteristics due to their Location

Trees located within three (3) metres of an approved structure **may** be considered to be undesirable due to their location. This distance is measured from the exterior surface of any trunk of the tree, measured at 1.4 metres above ground level, to the outer surface of the nearest footing, or the waters edge, of the approved structure.

With the exception of:

- any trees identified for retention by a condition of development consent; or
- any trees listed within the Schedules within s.7.2 of this DCP;

trees within a distance of three (3) metres from an approved structure may be removed without further consent from Council. Trees within 3m of an approved structure on an adjoining property may only be removed with the consent of the owner of that land.

Trees proposed to be removed in accordance with this clause should be first inspected by a Council Tree Assessment Officer or a trade or consulting arborist. This is to determine whether the tree is of a species to be protected under s.7.2 of this plan. An inspection by an ecologist may also be required if the tree is considered likely to be habitat for Threatened Species, listed under Schedules 1 & 2 of the Threatened Species Conservation Act (1995). **In these circumstances development consent is required and this exemption by location does not apply.**

The arborist may also identify special measures that should be in place to reduce the potential for injury or death of animals likely to inhabit the tree.

Such measures may include:

- Inspection of hollows and other potential sites on the tree;
- Sectional dismantling; and
- Supervision of works by an arborist and/or a licensed wildlife carer or handler.

In order to protect the amenity of the Shire and the suburb, Council strongly encourages the planting of a replacement tree native to the area, elsewhere on the site.

7.1.2 Plants with Undesirable Characteristics Generally

These plants have undesirable characteristics which may lead to poisoning, weed status, brittle and dangerous wood, excessive spread of roots, root suckering or bushland invasion. Consent is not required for removal of these plants.

Botanical Name	Common Name
<u>Trees</u>	
<i>Acacia salignus</i>	Wattle
<i>Ailanthus altissima</i>	Tree of Heaven
<i>Albizia lophantha</i>	Cape Wattle
<i>Celtis occidentalis</i>	Hackberry
<i>Chamaecytissus proliferus</i>	Tree Lucerne
<i>Cinnamomum camphora</i>	Camphor Laurel
<i>Erythrina x-sykesii</i>	Coral Tree
<i>Ficus elastica</i>	Indian Rubber Tree
<i>Gleditsia triacanthos</i> (but no grafted horticultural varieties)	Honey Locust
<i>Ligustrum lucidum</i>	Large Leaf Privet
<i>Ligustrum sinense</i>	Small Leaf Privet
<i>Olea spp</i> (except spp grown for olive production)	Olive
<i>Robinia pseudoacacia</i> (but not grafted horticultural varieties)	Locust
<i>Salix spp</i>	Willows
<i>Schefflera actinophylla</i>	Umbrella Tree
<i>Schinus terebinthifolius</i>	Brazilian Mastic
<i>Syagrus romanzoffianum</i>	Cocos Palm
<u>Shrubs and Other Plants (including herbs and vines)</u>	
<i>Agave americana</i>	Century Plant
<i>Ageratum houstonianum</i>	Ageratum
<i>Alocasia macrorrhizas</i>	Elephants Ears
<i>Alstroemeria psittacina</i>	New Zealand Christmas Bells
<i>Anredra cordifolia</i>	Madeira Vine
<i>Araujia hortorum</i>	Moth Vine
<i>Asclepias spp</i>	Cotton Bushes
<i>Asparagus asparagoides</i>	Asparagus Fern
<i>Asparagus fleckeri</i>	Asparagus Fern
<i>Asparagus sprengeri</i>	Asparagus Fern
<i>Bambusa spp</i>	Bamboo
<i>Bryophyllum tubiflora</i>	Kalanchoe
<i>Canna indica</i>	Canna Lily
<i>Cardiospermum grandiflorum</i>	Balloon Vine
<i>Cestrum aurantiacum</i>	Orange Cestrum
<i>Chlorophytum comosum</i>	Variegated Spider Plant
<i>Chrysanthemoides monolifera</i>	Boneseed/Bitou Bush
<i>Senna bicapsularis</i>	Senna
<i>Convza spp</i>	Canadian Fleabane
<i>Coreopsis lanceolata</i>	Coreopsis
<i>Cotoneaster glaucophylla</i>	Cotoneaster
<i>Crocasmia aurea</i>	Crocasmia
<i>Crocasmia crocosmiiflora</i>	Crocasmia
<i>Cyperus eragrostis</i>	Umbrella Sedge
<i>Dipogon lignosus</i>	Pink Coral Pea Creeper
<i>Foeniculum vulgare</i>	Fennel
<i>Freesia refracta</i>	Freesia
<i>Genista monspessulana</i>	Cape Broom
<i>Genista racemosa</i>	Broom
<i>Hedera helix</i>	English Ivy
<i>Hedychium gardnerianum</i>	Ginger Lily (not native ginger)

(7.1.2 Continued)

Botanical Name	Common Name
<i>Homeria breyniana</i>	One Leaf Cape Tulip
<i>Hydrocotyle bonariensis</i>	Two Leaf Cape Tulip
<i>Ipomoea cairica</i>	Morning Glory
<i>Ipomoea indica</i>	Morning Glory
<i>Ipomoea purpurea</i>	Morning Glory
<i>Lantana camara</i>	Lantana
<i>Lilium formosanum</i>	Formosa Lily
<i>Lonicera japonica</i>	Honeysuckle
<i>Macfadyena unguis-cati</i>	Catsclaw Creeper
<i>Mentha pulegium</i>	Pennyroyal
<i>Nephrolepis cordifolia</i>	Fishbone Fern
<i>Nerium oleander</i>	Oleander
<i>Nothoscordum inodorum</i>	Onion weed
<i>Ochna serrulata</i>	Mickey Mouse Plant
<i>Opuntia spp</i>	Prickly Pear
<i>Phyllostachys nigra</i>	Black Bamboo
<i>Polygala myrtifolia</i>	Polygala
<i>Polygonum capitatum</i>	Japanese Knotweed
<i>Pyracantha angustifolia</i>	Orange Fire Thorn
<i>Ranunculus repens</i>	Creeping Buttercup
<i>Sansevieria spp</i>	Mothers-in-Law Tongue
<i>Senecio mikanioides</i>	Cape Ivy
<i>Senna bicapsularis</i>	Senna (previously Cassia)
<i>Solanum pseudocapsicum</i>	Madiera Vine
<i>Thunbergia elata</i>	Black Eye Susan
<i>Tradescantia albiflora</i>	Wandering Jew
<i>Tropaeolum majus</i>	Nasturtium
<i>Verbena bonariensis</i>	Purpletop
<i>Vinca major</i>	Periwinkle
<i>Watsonia angusta</i>	Watsonia
<i>Zantedeschia aethiopica</i>	Arum Lily

7.1.3 Plants Declared Noxious

The following plants have been declared as Noxious Weeds. Those species marked with an '*' indicate species known to occur in Wyong Shire. Appropriate weed removal techniques (available from Council) should be applied to ensure that the spread of the weed does not occur.

If the weed is identified as a Class 1, 2 or 5 weed, Council must be notified within 3 days of discovery of the weed. Class 3 & 4 weeds may be removed without any further action.

Common Name	Botanical Name	Class
African boxthorn *	<i>Lycium ferocissimum</i>	4
African feathergrass	<i>Pennisetum macrourum</i>	5
African Turnipweed	<i>Sisymbrium runcinatum</i>	5
African turnipweed	<i>Sisymbrium thellungii</i>	5
Alligator weed *	<i>Alternanthera philoxeroides</i>	3
Anchored water hyacinth	<i>Eichhornia azurea</i>	1
Annual ragweed	<i>Ambrosia artemisiifolia</i>	5
Arrowhead *	<i>Sagittaria montevidensis</i>	5
Artichoke thistle	<i>Cynara cardunculus</i>	5
Athel tree	<i>Tamarix aphylla</i>	5
Bathurst/Noogoora/Californian/ cockle burns *	<i>Xanthium species</i>	4

(7.1.3 Continued)

Common Name	Botanical Name	Class
Bitou bush *	Chrysanthemoides monilifera subspecies rotunda	4
Black knapweed	Centaurea nigra	1
Blackberry *	Rubus fruticosus aggregate species	4
Boneseed *	Chysanthemoides monilifera subspecies monilifera	4
Bridal creeper	Asparagus asparagoides	5
Broomrapes (<i>Includes all Orobanche species except the native O. cernua variety Australiana and O.minor</i>)	Orobanche species	1
Burr ragweed	Ambrosia confertiflora	5
Cabomba	Cabomba caroliniana	5
Californian burrs	Xanthium species	4
Cayenne snakeweed	Stachytarpheta cayennensis	5
Chilean needle grass	Nassella neesiana	4
Chinese violet	Asystasia gangetica subspecies micrantha	1
Clockweed	Gaura lindheimeri	5
Cockle burrs	Xanthium species	4
Columbus grass	Sorghum x alnum	4
Corn sowthistle	Sonchus arvensis	5
Crofton weed *	Ageratina adenophora	4
Dodder (<i>includes all cuscuta species except the native species C. australis, C. tasmanica and C. victoriana</i>) *	Cuscuta species	5
East Indian hygrophila	Hygrophila polysperma	1
Espartillo	Achnatherum brachychaetum	5
Eurasian water milfoil	Myriophyllum spicatum	1
Fine-bristled burr grass	Cenchrus brownii	5
Fountain grass *	Pennisetum setaceum	5
Gallon's curse	Cenchrus biflorus	5
Giant Parramatta grass	Sporobolus feltilis	3
Glaucous starthistle	Carthamus glaucus	5
Golden thistle	Scolymus hispanicus	5
Gorse	Ulex europaeus	3
Green cestrum *	Cestrum parqui	3
Groundsel bush *	Baccharis halimifolia	3
Harrisia cactus	Harrisia species	4
Hawkweed	Hieracium species	1
Horsetail	Equisetum species	1
Hygrophila	Hygrophila costata	2
Hymenachne	Hymenachne amplexicaulis	1
Johnson grass *	Sorghum halepense	4
Karoo thorn	Acacia karroo	1
Kochia	Bassia scoparia	1
Lagorosiphon	Lagorosiphon major	1
Lantana sp. *	Lantana species	5
Long-leaf willow primrose	Ludwigia longifolia	5
Mexican feather grass	Nassella tenuissima	
Mexican poppy	Argemone mexicana	5
Miconia	Miconia species	1

(7.1.3 Continued)

Common Name	Botanical Name	Class
Mimosa	Mimosa pigra	1
Mistflower *	Ageratina riparia	4
Mossman River grass	Cenchrus echinatus	5
Noogoora burrs *	Xanthium species	4
Onion grass (<i>Includes all romulea species and varieties except R. rosea var. australis</i>) *	Romulea species	5
Oxalis (<i>Includes all Oxalis species and varieties except the native species O. chnodes, O. exilis, O. perannans, O. radicata, O. rubens and O. thompsoniae</i>) *	Oxalis species and varieties	5
Pampas grass *	Cortaderia species	4
Parthenium weed	Parthenium hysterophorus	1
Pond apple	Annona glabra	1
Prickly acacia	Acacia nilotica	1
Prickly pear	Cylindropuntia species	4
Prickly Pear *	Opuntia. Species except O. ficus indica	4
Red rice	Oryza rufipogon	5
Rhus tree *	Toxicodendron succedanea	4
Rubbervine	Cryptostegia grandiflora	1
Sagittaria *	Sagittaria platyphylla	5
Salvinia *	Salvinia molesta	3
Sand oat	Avena strigosa	5
Senegal tea plant	Gymnocoronis spilanthoides	1
Serrated tussock	Nassella trichotoma	4
Siam weed	Chromolaena odorata	1
Smooth-stemmed turnip	Brassica barrelieri subspecies oxyrrhina	5
Soldier thistle	Picnomon acama	5
Spiny burrgrass	Cenchrus incertus	4
Spiny burrgrass	Cenchrus longispinus	4
Spiny emex *	Emex australis	4
Spotted knapweed	Centaurea maculosa	1
St Johns wort *	Hypericum perforatum	4
Texas blueweed	Helianthus ciliaris	5
Water caltrop	Trapa species	1
Water hyacinth *	Eichhornia crassipes	4
Water lettuce	Pistia stratiotes	1
Water soldier	Stratiotes aloides	1
Willows (<i>Includes all Salix species except S. babylonica S. x reichardtii, S. x calodendron</i>)	Salix species	5
Witchweed (<i>Includes all striga species except native species and Striga parviflora</i>)	Striga species	1
Yellow burrhead	Limnocharis flava	1
Yellow nutgrass	Cyperus esculentus	5

7.2 Significant Species Schedule

Species having conservation significance are listed under one or more of the following headings. These lists are regularly updated and it is recommended that Council or, where relevant, the Department of Environment, Climate Change and Water (DECCW) is to be contacted to determine the status of species proposed to be removed, harmed, picked, etc., prior to any works being undertaken.

- **Protected Native Plants (s.7.2.1)**, as contained in Schedule 13 of the **National Parks and Wildlife Act 1974**. These species may be picked or removed from private land or land controlled by Council with the consent of the owner, providing the action is not for commercial, scientific, conservation or educational purposes. Removal, harming or picking of these species for these purposes, or if the species is also listed as an Endangered, Vulnerable Plant Species, Endangered Population or Ecological Community, requires a licence to be obtained from the DECCW.
- **Threatened Plant Species, Populations and Ecological Communities (s7.2.2)**, as listed under Schedule 1 and 2 of the **Threatened Species Conservation Act 1995**. These species may not be removed, picked or harmed unless a licence to do so has been obtained from the DECCW.
- **Keystone Species (s7.2.3)**, identified by Wyong Council as having a critical relationship in providing food or habitat for native fauna. These species may not be removed unless Council consent has been obtained.
- **Species of Local Conservation Significance (s7.2.4)**, These species may not be removed unless Council consent has been obtained.
- **Trees of Cultural Significance (s7.2.5)** These species may not be removed unless Council consent has been obtained.

7.2.1 Protected Native Plants Contained in Schedule 13 of the National Parks and Wildlife Act 1974

Part 1: Plant parts used in the cut-flower industry

Scientific Name	Common Name(s)
Group 1	
Group 2	
<i>Adiantum</i> spp.	Maidenhair Fern
<i>Archontophoenix cunninghamiana</i>	Bangalow Palm (foliage only)
<i>Baekea linifolia</i>	Weeping Baekea
<i>Baekea virgata</i>	Twiggy Heath-myrtle, Tall Baeckea
<i>Banksia spinulosa</i>	Hairpin Banksia
<i>Cassinia aureonitens</i>	Yellow Cassinia
<i>Caustis</i> spp., native to NSW	Curly Sedges, Old Man's Whiskers
<i>Cordyline stricta</i>	Narrow-leaved Palm Lily
<i>Crowea exalata</i>	Crowea
<i>Crowea saligna</i>	Crowea
<i>Davallia pyxidata</i>	Hare's Foot Fern
<i>Dodonaea lobulata</i>	Lobed-leaved Hop Bush
Scientific Name	Common Name(s)

Eriostemon spp. Native to NSW (unless listed under the *Threatened Species Conservation*

<i>Act 1995)</i>	
<i>Gahnia sieberiana</i>	Red-fruited Saw Sedge
<i>Isopogon</i> spp. native to NSW	Drumsticks, Cone Bushes
<i>Kunzea ambigua</i>	Tick Bush
<i>Kunzea capitata</i>	Pink Kunzea
<i>Leptospermum lanigerum</i>	Woolly Tea-tree
<i>Leptospermum rotundifolium</i>	Round-leaf Tea-tree
<i>Livistona australis</i> (foliage only)	Cabbage Tree Palm, Fan Palm
<i>Lomatia silaifolia</i>	Crinkle Bush
<i>Persoonia</i> spp. native to NSW (except <i>P. pinifolia</i> and all species listed under the <i>Threatened Species Conservation Act 1995</i>)	Geebungs
<i>Petrophile</i> spp. native to NSW	Conesticks
<i>Phebalium squamulosum</i>	Scaly Phebalium
<i>Philothea</i> spp. native to NSW (except <i>P. obovalis</i> and all species listed under the <i>Threatened Species Conservation Act 1995</i>)	philothecas
<i>Ptilotus exaltatus</i>	Tall Mulla Mulla
<i>Ptilotus obovatus</i>	Smoke Bush, Cotton Bush
<i>Pycnosorus</i> spp., native to NSW	Billy-buttons
<i>Restio tetraphyllus</i>	Tassel-rush
<i>Sprengelia incarnata</i>	Pink Swamp Heath
<i>Sticherus flabellatus</i>	Shiny Fan-fern, Umbrella Fern
<i>Swainsona formosa</i>	Sturt's Desert Pea
<i>Tmesipteris</i> spp.	Ferns
<i>Xanthorrhoea</i> spp.—foliage only	Grass Trees
<i>Xylomelum</i> spp., native to NSW	Woody Pear
Zamiaceae, native to NSW	Cycads
Group 3	
<i>Actinotus</i> spp., native to NSW (except <i>A. minor</i>)	Flannel Flower
<i>Boronia</i> spp., native to NSW	Boronias
<i>Doryanthes excelsa</i> (foliage only)	Giant Lilies
<i>Eriostemon australasius</i>	Wax Flower
<i>Lycopodium</i> spp., native to NSW	Mountain Moss
<i>Persoonia pinifolia</i>	Pine-leaved Geebung
<i>Philothea obovalis</i>	Wax Flower
Group 4	
<i>Blandfordiaspp.</i>	Christmas Bells
<i>Doryanthes excelsa</i> (flowers only)	Giant Lily
<i>Xanthorrhoea</i> spp. (flowers only)	Grass Tree
Group 5	
<i>Boronia deanei</i>	Dean's Boronia
<i>Boronia umbellata</i>	Boronia
<i>Craspedia</i> spp., native to NSW	Billy Buttons
<i>Dicranopteris linearis</i>	
Scientific Name	Common Name(s)
<i>Doryanthes palmeri</i>	Spear Lily
<i>Grevillea longifolia</i>	Fern-leaf Grevillea
<i>Isopogon fletcheri</i>	
<i>Leptospermum spectabile</i>	Cycad
	Cycad

<i>Macrozamia johnsonii</i>	Geebung
<i>Macrozamia pauli-guilielmi</i> spp. <i>flexuosa</i>	
<i>Persoonia</i> spp.	
<i>Phebalium bifidum</i>	
<i>Phebalium glandulosum</i> spp. <i>eglandulosum</i>	Native Daphne, Long-leaf Wax Flower
<i>Philotheca ericifolia</i>	Waratah
<i>Philotheca obovatifolia</i>	
<i>Telopea</i> spp., native to NSW	
All other species of plant listed in Schedule 1, 1A or 2 to the Threatened Species Conservation Act 1995, unless otherwise listed in this Schedule	

Part 2: Whole Plants

All other species of plant included in the list of threatened species, as amended from time to time, established under section 178 of the Environment Protection and Biodiversity Conservation Act 1999 of the Commonwealth and published in the Commonwealth of Australia Gazette.

Scientific Name	Common Name(s)
Group 1	
<i>Ceratopetalum gummiferum</i>	Christmas Bush
<i>Isopogon</i> spp.	Drumsticks
<i>Swainsona formosa</i>	Sturt's Desert Pea
Group 2	
<i>Telopea aspera</i>	Gibraltar Range Waratah
<i>Telopea mongaensis</i>	Monga Waratah, Braidwood Waratah
<i>Telopea oreades</i>	Gippsland Waratah
<i>Telopea speciosissima</i>	Waratah
<i>Wollemia nobilis</i>	Wollemi Pine
Group 3	
<i>Areaceae</i> , native to NSW	Palms
<i>Asplenium australasicum</i>	Bird's-nest Fern
<i>Asplenium falcatum</i>	Fern
<i>Cyanthea</i> spp.	Tree Ferns
<i>Dicksonia</i> spp.	Tree Ferns
<i>Orchidaceae</i> , native to NSW	Orchids
<i>Platyserium</i> , native to NSW	Elk Horn and Stag Horn
<i>Sphagnum</i> spp.	Sphagnum Mosses
<i>Todea barbara</i>	King Fern
<i>Xanthorrhoea</i> spp.	Grass Trees
<i>Zamiaceae</i> , native to NSW	Cycads
Group 4	
<i>Casuarina cunninghamiana</i>	River Oak
<i>Pandanus</i> spp. native to NSW	Pandanus

7.2.2 Threatened Plant Species, Populations and Ecological Communities

The following is a list of endangered and vulnerable plant species (Schedule 1 and 2 of the Threatened Species Conservation Act 1995) and endangered populations and ecological communities known to exist in Wyong Shire. Other listed species may occur in the Shire but have not been identified at this time. Reference should also be made to the schedules within the Act for the most recent listings by the Scientific Committee.

Vulnerable Species

Angophora inopina, a small tree to 8 metres tall, often multi-stemmed, found in open dry sclerophyll forest within the Wallarah catchment between Charmhaven and Wyee.

Astrotricha crassifolia, a shrub to 2.4m tall, broad stiff linear leaves covered by dense hairs. Upper surface is shiny and smooth or occasionally wrinkled, lower surface covered in brown hairs. Occurs in dry sclerophyll woodland on sandstone.

Baloskion longipes, a perennial grass-like herb. Flowering stems are up to 1.5m tall and circular in cross section. Commonly found in swamps or depressions in sandy alluvium, sometimes growing with sphagnum moss. Also occurs in swales within tall forest, and in Black Gum (*Eucalyptus aggregata*) Woodland.

Callistemon linearfolius, a shrub up to 2-4m tall with long and narrow lance shaped leaves. Flowers are clustered into the typical 'bottlebrush' Callistemons and are red in colour. Flowers in spring and grows in dry sclerophyll forest on the coast and adjacent ranges.

Cryptostylis hunteriana, an orchid in Precinct 4 and the Lake Haven area, at the southern limit of its population. Only identifiable during flowering (December to early February).

Darwinia glaucophylla, a prostrate spreading shrub. Leaves are blue-grey with a white bloom and often tinged with red-purple. Flowers are yellow-green when new, turning red in upper parts as flower matures. Occurs in sandy heath, scrub and woodlands. Often associated with sandstone rock platforms or near hanging swamps and friable sandstone shallow soils.

Diuris praecox, is an orchid that occurs on Munmorah Conglomerates.

Epacris purpurascens var. purpurascens, an erect shrub, 50 - 180 cm high. Leaves are spreading and recurved above, ovate to heart-shaped, 7 - 21 mm long, 4.4 - 9 mm wide, with sharply pointed tips. Flowers are showy, 7 - 10 mm diam., covering much of the branchlets, white or sometimes pinkish. Fruit approximately 2 mm long. Found within grassy woodlands with strong shale soil influence.

Eucalyptus camfieldii, a mallee (multi-trunked, generally less than 5 metres high) growing in coastal sandy soil, populations recently identified at Norah Head, Charmhaven and Bateau Bay. Also includes *Eucalyptus camfieldii* x *Eucalyptus capitellata*.

Grevillia parviflora subsp parviflora, a low spreading to erect shrub to 1.5m high. Leaves are narrow and flowers are white or pinkish. Occurs in light clayey soils in woodlands.

Maundia triglochinosoides, a perennial herb. Flowers in warmer months. Occurs in swamps or shallow freshwater on heavy clay. Is at its southern limit near Wyong

Melaleuca biconvexa, a shrub or small tree growing in moist swamp forests communities on Quaternary Alluvium soils along creek lines.

Rutidosia heterogama, small perennial herb within the daisy family with a woody base. Grows in heath on sandy soils and moist areas in open forest.

Syzygium paniculatum, a Lilly Pilly found in littoral and gallery rainforest on Quaternary Sands such as, North Entrance Peninsula, Canton Beach, the old pump station site at North Entrance, Munmorah State Recreation Area, Norah Head and the Ourimbah Creek Valley.

Tetratheca glandulosa, a purple flowering low shrub in heath or scrub on sandy or rocky soils (Kulnura area).

Tetratheca juncea, a low shrub, almost exclusively confined to the Munmorah Conglomerate sequence mainly on ridgetops in small, isolated and patchy populations in the north-east of the Shire.

Endangered Species

Acacia bynoeana, a low shrub found in heath and woodlands on sandy soils in the Kulnura plateau area and in some *Eucalyptus haemastoma* woodlands.

Caladenia tessellata, a ground orchid from dry forest and heath in coastal areas extending from Porters Creek to Munmorah State Recreation Area. Often only evident after fire in dense shrubbery. Only identifiable when flowering from late August to early November.

Caladenia porphyrea, a terrestrial herb orchid, growing singly or in small groups. Highly restricted geographic distribution. It has been recorded from 2 localities in the Wyong local government area approx. 2 km apart. At these locations it covers areas of 2 ha and 0.2ha respectively.

Chamaesyce psammogeton, a prostrate perennial herb found on foredunes and exposed headlands.

Corunastylis insignis, a terrestrial orchid with a single cylindrical leaf which encloses the flowering system. Flowers are dark purple. Located between Chain Valley Bay and Wyong. Grows in patches of Kangaroo grass amongst shrubs and hedges in heathland and forests. Associated with dry sclerophyll forests.
PREVIOUSLY GENOPLESIIUM INSIGNIS

Cynanchum elegans, a climber or twiner which can grow to 10m long with a stem thickness of 3.5cm with white flowers. Occurs on the edge of dry rainforest vegetation. Can also be associated with other vegetation types including littoral rainforest; Coastal Tea-tree *Leptospermum laevigatum* – Coastal Banksia *Banksia integrifolia* subsp. *integrifolia* coastal scrub; Forest Red Gum *Eucalyptus tereticornis* aligned open forest and woodland; Spotted Gum *Eucalyptus maculata* aligned open forest and woodland; and Bracelet Honeymyrtle *Melaleuca armillaris* scrub to open scrub.

Diuris bracteata, an orchid with two linear leaves. Flowers are yellow with blackish markings. Located in dry sclerophyll woodlands with total number of individuals estimated at 50.

Eucalyptus pumila, is a small tree that grows in clumps and is found near Mangrove Mountain.

Genoplesium insignis, A terrestrial orchid with a solitary cylindrical leaf that encloses the flowering stem. Flowers are dark purple and approximately 5 mm in diameter. Recorded from four localities between Chain Valley Bay and Wyong in Wyong local government area. Grows in patches of *Themeda australis* (Kangaroo Grass) amongst shrubs and sedges in heathland and forest. Flowering period is September to October.

Hibbertia procumbens, a prostrate spreading shrub with yellow flowers. Stems are smooth and mostly hairless, with leaves linear and having similar surfaces. Known populations occur within *Banksia ericifolia*–*Angophora hispida*–*Allocasuarina distyla* scrub/heath on skeletal sandy soils. May also be found

associated with 'hanging swamp' vegetation communities on sandy deposits and in escarpment areas.

Prostanthera askania, a small shrub 2 metres high occurring in rainforests and gullies and only known to occur at Askania Park, Strickland State Forest, Niagara Park, Matcham Holgate and Berkeley Vale area.

Prostanthera junonis, a low spreading shrub 0.1m to 0.3m high. Only recorded in the Gosford/Wyong local government area. One population at Somersby and one at Kulnura, both growing on soils derived from Hawkesbury Sandstones.

Rulingia prostrata, a small prostrate shrub found in heath and dry sclerophyll forests mainly in gullies and along escarpments. Recorded in Ourimbah State Forest.

Senecio spathulatus, low growing smooth stemmed daisy often forming hummocks. Grows on primary dunes.

Critically Endangered Species

***Thelymitra* sp. 'Adorata'**, a hairless terrestrial herb, dying back annually to a tuberous rootstock. A single linear to linear-lanceolate leaf emerges from the ground in about May, dying off in late November. The flowering stem (usually emerging in September, with not all plants flowering in all years) is dark bluish-purple when seen from a distance. Individual flowers 15-27 mm across, pale to dark blue, opening in warm weather. Found in the area bounded by the towns of Wyong, Warnervale and Wyongah. Recorded populations occupy patches totalling less than 100 m². The geographical distribution is therefore very highly restricted.

Endangered Populations

Eucalyptus oblonga endangered population, consists of trees to 15m high, narrow leaved Stringybark. Occurs in Bateau Bay on coastal sands of the Norah Head Soil Landscape. Population consists of about 20 trees, and can sometimes be confused with *Eucalyptus camfieldii* which occurs in the same area. The population is at the eastern limit of the species' range.

Eucalyptus parramattensis subsp parramattensis endangered population, consists of approximately 1300 trees in the Wyong LGA and 10 in the Lake Macquarie LGA. The population is located at the north eastern limit of the range of the species.

Endangered Ecological Communities

Coastal Saltmarsh in the NSW North Coast, Sydney Basin and South East Corner Bioregions, occurs in the intertidal zone on the shores of estuaries and lagoons, permanently or intermittently open to the sea, often a zone on the landward side of mangrove stands. Characteristic plants include *Baumea juncea*, *Juncus kraussii*, *Sarcocornia quinqueflora*, *Sporobolus virginicus*, *Triglochin striata*, *Isolepis nodosa*, *Samolus repens*, *Selliera radicans*, *Suaeda australis* and *Zoysia macrantha*. Occasionally mangroves are scattered through the saltmarsh. Tall reeds may also occur, as well as salt pans.

Freshwater wetlands on coastal floodplains of the NSW North Coast, Sydney Basin and South East Corner Bioregions, occurs on silts, muds or humic loams in low-lying parts of floodplains, alluvial flats, depressions, drainage lines, backswamps, lagoons and lakes. May also occur in backbarrier landforms where floodplains adjoin coastal sandplains. Dominated by herbaceous plants and have very few woody species. The structure and composition of the community varies both spatially and temporally depending on water regime.

Littoral Rainforest in the NSW North Coast, Sydney Basin and South East Corner Bioregions, generally a closed forest, occurring on sand dunes and on soil derived from underlying rocks. The species of this community are predominantly rainforest species. Associated species including *Angophora costata*, *Banksia integrifolia*, *Eucalyptus botryoides* and *Eucalyptus tereticornis*.

Low woodland with heathland on indurated sand at Norah Head, very open cover of trees up to 3 metres high with a mid to dense cover of shrubs, grasses, and grass like plants (e.g. rushes and sedges) up to 1 metre high. Dominant trees include *Melaleuca quinquenervia* and *Melaleuca sieberi*. The endangered *Eucalyptus camfieldii* is also present. Shrubs include *Banksia oblongifolia*, *Hakea dactyloides*, and *Allocasuarina distyla* plus others.

River-Flat Eucalypt forest on Coastal Floodplains of the NSW North Coast, Sydney Basin and South East Corner Bioregions, associated with silts, clay-loams and sandy loams, on periodically inundated alluvial flats, drainage lines and river terraces associated with coastal floodplains. Has a tall open tree layer of eucalypts, which may exceed 40 m in height, but can be shorter in regrowth stands or in lower quality sites. Composition of the tree stratum varies however, the most widespread and abundant dominant trees include *Eucalyptus tereticornis* (forest red gum), *E. amplifolia* (cabbage gum), *Angophora floribunda* (rough-barked apple) and *A. subvelutina* (broad-leaved apple).

Swamp oak floodplain forest of the NSW North Coast, Sydney Basin and South East Corner bioregions, associated with grey-black clay-loams and sandy loams, where the groundwater is saline or sub-saline, on waterlogged or periodically inundated flats, drainage lines, lake margins and estuarine fringes associated with coastal floodplains. Has a dense to sparse tree layer in which *Casuarina glauca* (swamp oak) is the dominant species. Other trees including *Acmena smithii* (lilly pilly), *Glochidion* spp. (cheese trees) and *Melaleuca* spp. (paperbarks) Understorey characterised by vines, *Parsonsia straminea*, *Geitonoplesium cymosum* and *Stephania japonica* var. *discolor*, a sparse cover of shrubs, and a continuous groundcover of forbs, sedges, grasses and leaf litter.

Swamp sclerophyll forest on coastal floodplains of the NSW North Coast, Sydney Basin, and South East Corner bioregions, Associated with humic clay loams and sandy loams, on waterlogged or periodically inundated alluvial flats and drainage lines associated with coastal floodplains. Open to dense tree layer of eucalypts and paperbarks. Trees may exceed 25 m in height, but can be shorter in regrowth stands. Includes some areas of fernland and tall reedland or sedgeland, where trees are very sparse or absent. Widespread and abundant dominant trees include *Eucalyptus robusta* (swamp mahogany), *Melaleuca quinquenervia* (paperbark). Other trees may be scattered throughout at low abundance or may be locally common at few sites, including *Callistemon salignus* (sweet willow bottlebrush), *Casuarina glauca* (swamp oak) and *Eucalyptus resinifera* subsp. *hemilampra* (red mahogany), *Livistona australis* (cabbage palm) and *Lophostemon suaveolens* (swamp turpentine).

Sydney Freshwater Wetlands in the Sydney Basin Bioregion, restricted to freshwater swamps in coastal areas. Occurs on sand dunes and low-nutrient sandplains along coastal areas. Species include sedges and aquatic plants such as *Baumea* species, *Eleocharis sphacelata*, *Gahnia* species, *Ludwigia peploides* ssp. *montevicensis* and *Persicaria* species.

Lowland Rainforest in NSW North Coast and Sydney Basin Bioregion, is a community of subtropical rainforest and some related, structurally complex forms of dry rainforest. In its relatively undisturbed state, it has a closed canopy, characterised by a high diversity of trees and a wide variety of shapes and sizes. Typically, the trees form three major strata: emergents, canopy and sub-canopy which, combined with variations in crown shapes and sizes results in an irregular canopy appearance. Includes palms, vines and vascular epiphytes.

7.2.3 Keystone Species

Keystone species are functionally important links in the wildlife food chain. These species are typically widespread and common in Wyong but clearing and fragmentation have significantly reduced the occurrence of some species (eg. Eucalyptus robusta and Eucalyptus tereticornis). Whilst the list below is not exhaustive, the species listed are considered the most important for retention.

Botanical Name	Common Name	Potential Schedule 1 or 2 Fauna
<i>Acacia irrorata</i> and other 'gum' producing <i>Acacia</i> species	Wattle	Squirrel Glider
<i>Acacia longifolia</i>	Wattle	Squirrel Glider
<i>Allocasuarina torulosa</i>	Forest Oak	Glossy Black Cockatoo
<i>Angophora costata</i>	Sydney Red Gum	Squirrel Glider
<i>Banksia integrifolia</i>	Banksia	Squirrel Glider
<i>Banksia oblongifolia</i>	Banksia	Squirrel Glider
<i>Banksia serrata</i>	Banksia	Squirrel Glider
<i>Banksia spinulosa</i>	Banksia	Squirrel Glider
<i>Corymbia gummifera</i>	Red Bloodwood	Squirrel Glider
<i>C. maculata</i>	Spotted Gum	Squirrel Glider/Yellow-bellied Glider
<i>Eucalyptus acmenoides</i>	White Mahogany	Squirrel Glider
<i>E. amplifolia</i>	Cabbage Gum/Round leaved Gum	Yellow-bellied Glider
<i>E. botryoides</i>	Bangalay	Yellow-bellied Glider
<i>E. deanei</i>	Deanes Gum	Yellow-bellied Glider
<i>E. fibrosa</i>	Broad leaved Ironbark	Regent Honeyeater
<i>E. haemastoma</i>	Scribbly Gum	Masked Owl/Squirrel Glider
<i>E. longifolia</i>	Woollybutt	Various
<i>E. moluccana</i>	Grey Box	Koala
<i>E. paniculata</i>	Grey Ironbark	Regent Honeyeater
<i>E. pilularis</i>	Blackbutt	Koala/Greater Glider
<i>E. piperita</i>	Sydney Peppermint	Squirrel Glider
<i>E. propinqua</i>	Small Fruited Grey Gum	Yellow-bellied Glider/Koala
<i>E. punctata</i>	Grey Gum	Yellow-bellied Glider/Koala
<i>E. resinifera</i>	Red Mahogany	Yellow bellied Glider
<i>E. robusta</i>	Swamp Mahogany	Yellow-bellied and Squirrel Gliders/ Koala/Regent Honeyeater
<i>E. saligna</i>	Sydney Bluegum	Yellow-bellied Glider
<i>E. siderophloia</i>	Northern Grey Ironbark	Regent Honeyeater
<i>E. tereticornis</i>	Forest Red Gum	Yellow-bellied Glider/Koala
<i>E. umbra</i>	Broad leaved White Mahogany	Squirrel Glider
<i>Melaleuca quinquenervia</i> and other local <i>Melaleuca</i> species		Ringtail Possum
Rainforest communities in gullies and littoral rainforest patches at North Entrance		Frugivorous Pigeons/Doves (Fruit Eating)
<i>Xanthorrhoea</i> spp	Grass Tree	Squirrel Glider

7.2.4 Species of Local Conservation Significance

As listed by Benson, D., of the Royal Botanic Gardens, Sydney

Botanical Name	Common Name	
<i>Acronychia wilcoxiana</i>	Silver Aspen	Climber
<i>Alpinia coerulea</i>	Native Ginger	Herb
<i>Arthropteris beckleri</i>	Fishbone Fern	Fern
<i>Asplenium aethiopicum</i>	A Birds Nest Fern	Fern
<i>Banksia paludosa</i>	Swamp Banksia	Shrub
<i>Blandfordia grandiflora</i>	Christmas Bells	Herb
<i>Caldcluvia paniculosa</i>	Rose-marara	Tree
<i>Callistemon shiressii</i>		Shrub
<i>Cryptocarya obovata</i>	Laurelk	Tree
<i>Cryptocarya rigida</i>	Rose Maple	Tree
<i>Decaspermum paniculatum</i>	Myrtle	Tree
<i>Dysoxylon fraserianum</i>	Rosewood	Tree
<i>Elaeocarpus obovatus</i>	Hard Quandong	Tree
<i>Embelia australiana</i>		Climber
<i>Endiandra discolor</i>		Tree
<i>Eucalyptus resinifera</i>	Red Mahogany	Tree
<i>Eucalyptus robusta</i>	Swamp Mahogany	Tree
<i>Ficus fraseri</i>	Sandpaper Fig	Tree
<i>Grevillea shiressii</i>		Shrub
<i>Hakea bakerana</i>	Hakea	Shrub
<i>Lepidosperma quadrangulatum</i>		Reed
<i>Macarthuria neocambria</i>		Herb
<i>Maundia triglochinosoides</i>		Aquatic macrophyte
<i>Melaleuca biconvexa</i>	Biconvex Paperbark	Tree
<i>Neolitsia australiensis</i>	Green Bolly Gum	Tree
<i>Olearia nernstii</i>	Daisy Bush	Shrub
<i>Parsonia velutina</i>		Climber
<i>Prostanthera askania</i>	Tranquility Mintbush	Shrub
<i>Rhodomyrtus psidioides</i>		Tree
<i>Ripogonum fawcettianum</i>		Climber
<i>Sesuvium portulacastrum</i>		Water plant around lake shore
<i>Tetrastigma nitens</i>		Climber
<i>Toona cilata (australis)</i>	Red Cedar	Tree
<i>Vittaria elongata</i>		Fern
<i>Xanthorrhoea resinosa spp. fulva</i>	Grass Tree	Shrub

7.2.5 Trees of Cultural Significance

Plantings and remnant native trees of these species are significant features of Wyong Shire's cultural landscape.

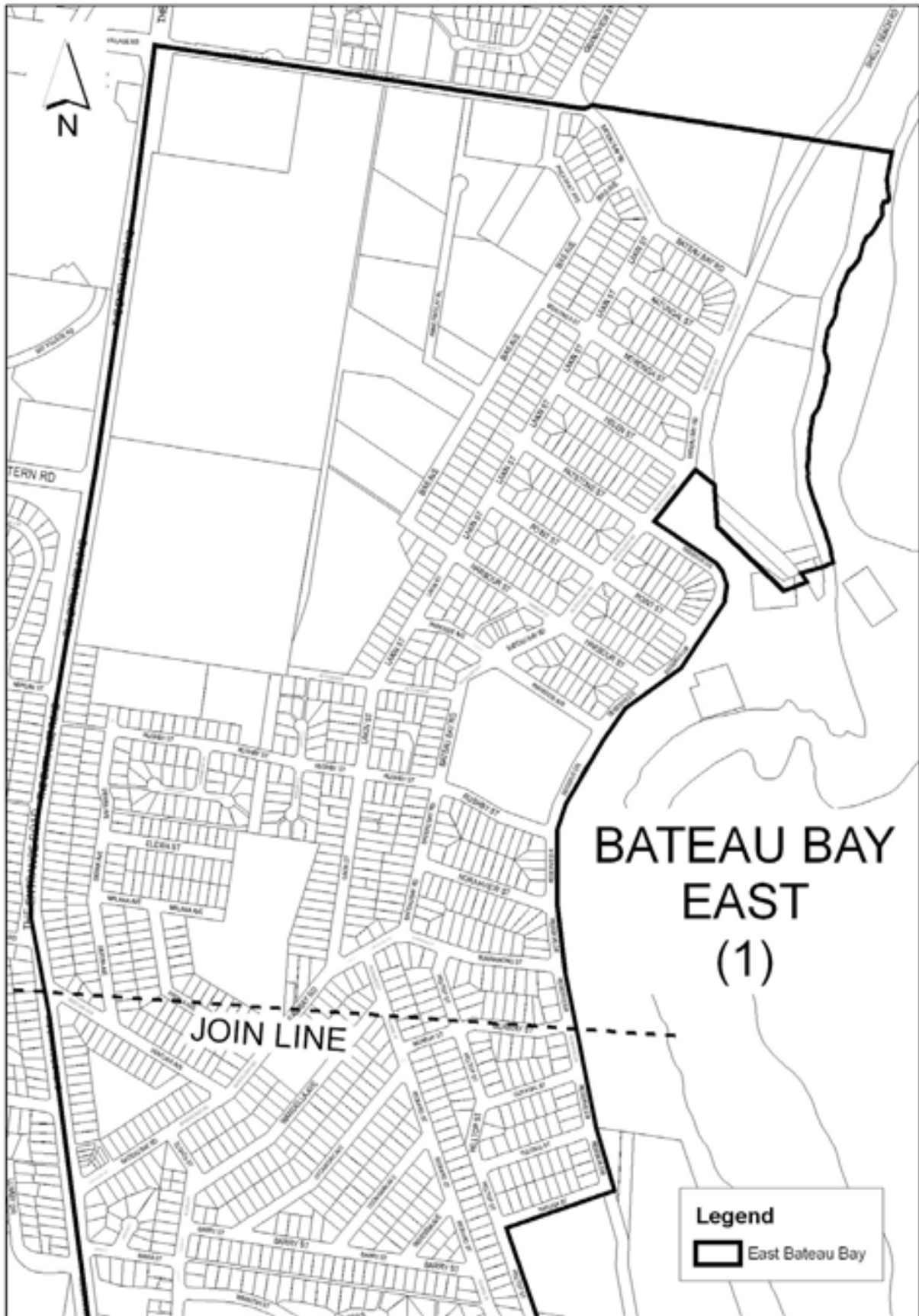
Common Name (Botanical Name)	Locality ¹	Minimum Trunk Size (diameter at 1.4 metres ²)	Tree Protection Zone (metres from trunk)	
			Optimum ³	Minimum ⁴
Native Species				
Smooth Bark Apple Gum (<i>Angophora costata</i>)	Bateau Bay East	300 mm	5.0	3.0
Rough Bark Apple Gum (<i>Angophora floribunda</i>)	Bateau Bay East	300 mm	4.0	3.0
Spotted Gum (<i>Corymbia maculata</i>)	Bateau Bay East Wyongah	300 mm	5.0	3.0
Tuckeroo (<i>Cupaniopsis anacardiodes</i>)	Bateau Bay East Canton Beach Foreshore	250 mm	4.0	3.0
Red Bloodwood (<i>Eucalyptus gummifera</i>)	Bateau Bay East	300 mm	4.0	3.0
Scribbly Gum (<i>Eucalyptus haemastoma</i>)	Bateau Bay East	300 mm	4.0	3.0
Ironbark (<i>Eucalyptus paniculata</i>)	Bateau Bay East Wyongah	300 mm	6.0	4.0
Blackbutt (<i>Eucalyptus pilularis</i>)	Bateau Bay East Wyongah	300 mm	8.0	4.0
Red Mahogany (<i>Eucalyptus resinifera</i>)	Bateau Bay East	300 mm	5.0	3.0
Swamp Mahogany (<i>Eucalyptus robusta</i>)	Bateau Bay East	300 mm	5.0	3.0
Forest Redgum (<i>Eucalyptus tereticornis</i>)	Bateau Bay East	300 mm	8.0	4.0
Broad-leaved Paperbark (<i>Melaleuca quinquenervia</i>)	Bateau Bay East	300 mm	6.0	4.0
Broad-Leaved Mahogany (<i>Eucalyptus umbra</i>)	Wyongah			
Northern Grey Ironbark (<i>Eucalyptus siderophloia</i>)	Wyongah			
Swamp Oak (<i>Casuarina glauca</i>)	Willow Creek Budgewoi East			
Tuckeroo (<i>Cupaniopsis anacardiodes</i>)	Willow Creek			
Bangalay (<i>Eucalyptus botryoides</i>)	Willow Creek			
Tallowood (<i>Eucalyptus microcorys</i>)	Willow Creek			
Swamp mahogany (<i>Eucalyptus robusta</i>)	Willow Creek Budgewoi East			
Sydney Blue Gum (<i>Eucalyptus saligna</i>)	Willow Creek			
Port Jackson Fig (<i>Ficus rubignosa</i>)	Willow Creek			
Cheese Tree (<i>Glochidion ferdinandi</i>)	Willow Creek			
Cabbage-Tree Palm (<i>Livistona australis</i>)	Willow Creek			
Broad-leaved Paperbark (<i>Melaleuca quinquenervia</i>)	Willow Creek, Budgewoi East			
Magenta Cherry (<i>Syzygium paniculatum</i>)	Willow Creek			
Exotic Species				
Bunya Pine (<i>Araucaria bidwillii</i>)	Whole of Shire	500 mm	5.0	4.0
Hoop Pine (<i>Araucaria cunninghamii</i>)	Whole of Shire	500 mm	5.0	4.0
Norfolk Island Pine (<i>Araucaria heterophylla</i>)	To 1km inland	300 mm	4.0	4.0

Common Name (Botanical Name)	Locality ¹	Minimum Trunk Size (diameter at 1.4 metres ²)	Tree Protection Zone (metres from trunk)	
			Optimum ³	Minimum ⁴
Exotic Species (Continued)				
Liquidamber (<i>Liquidambar styraciflua</i>)	Bateau Bay East	450 mm	5.0	3.0
Canary Date Palm (<i>Phoenix canariensis</i>)	Wyong & The Entrance Townships	250 mm	3.0	2.0
Date Palm (<i>Phoenix sylvestris</i>)	Wyong Township	150 mm	3.0	2.0
Significant vegetation on 100 Shirley Street including Camphor Laurel (<i>Cinnamomum camphor</i>) and other species	100 Shirley Street, Ourimbah (refer LEP Amendment No 144)			

NOTES:

- 1 **Bateau Bay East** is the area of Bateau Bay East bounded by The Entrance Road, Yakalla Street and Wyrabalong National Park as identified by **Map 1**
- 2 Where the tree has more than one trunk, the trunk size is obtained by adding the measurements of each trunk together to get a total trunk size.
- 3 Examination of the tree and roots by a consulting arborist, and preparation of an arborist's report under Clause 2.7, may be able to demonstrate that disturbance of this area is possible, but not less than the Minimum Tree Zone. Disturbance includes excavation deeper than 200 mm, any construction activities and placement of paving or impermeable hard surfacing.
- 4 This distance indicates the minimum tree protection zone required to maintain the tree. However, a consulting arborist's report prepared under Clause 2.7 which includes the examination of the tree and roots, must firstly be prepared and show, to Council's satisfaction, that the disturbance and injury will not cause a reduction in the tree's life expectancy.
- 5 **Willow Creek** is the area between Norfolk Street, Anzac Road, Willow Street and The Entrance Road at Long Jetty as identified by **Map 2**. All plantings and remnant native trees of these species in this zone are to be preserved. Preparation of a report by a consulting arborist shall be submitted with an application for any development within the Willow Creek area, to ensure the proposed development is consistent with council's tree preservation objectives.
- 6 **Wyongah** is the area bounded by Wahroonga Road, Springall Avenue, Craigie Avenue, Stelling Street, Stanley Street, Kaye Avenue, Minnamurra Road, and the foreshore of Tuggerah Lake adjacent to Tuggerawong Road at Wyongah as identified by **Map 3**. All plantings and remnant native trees of these species in this zone are to be preserved. Preparation of a report by a consulting arborist shall be submitted with an application for any development within the Wyongah area, to ensure the proposed development is consistent with council's tree preservation objectives.
- 7 **Budgewoi East** is the area of Crown Land on the Lake Munmorah foreshore containing the Budgewoi Tourist Park and including the two parcels of land located north of Weemala and Ourringo Streets and extending east along Mimosa Road to the northern cadastral boundary, behind the row of houses fronting Mimosa Road. It is bounded in the west by Budgewoi Creek and in the north by the Lake Munmorah foreshore as identified in **Map 4**. All plantings and remnant native trees of these species in this zone are to be preserved. Preparation of a report by a consulting arborist shall be submitted with an application for any development within the Budgewoi East area, to ensure the proposed development is consistent with council's tree preservation objectives.

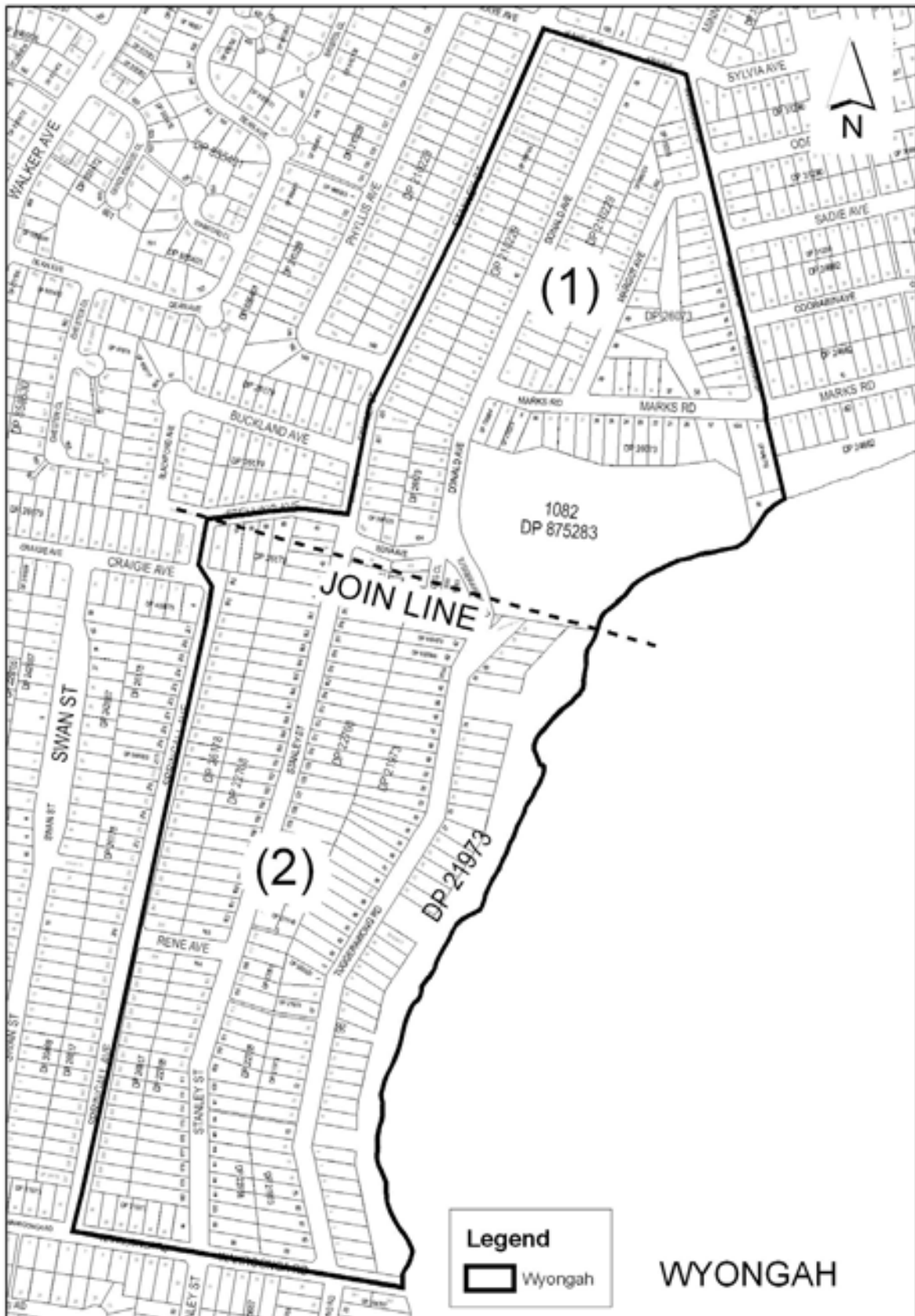
MAP 1A - BATEAU BAY EAST AREA



MAP 1B - BATEAU BAY EAST AREA



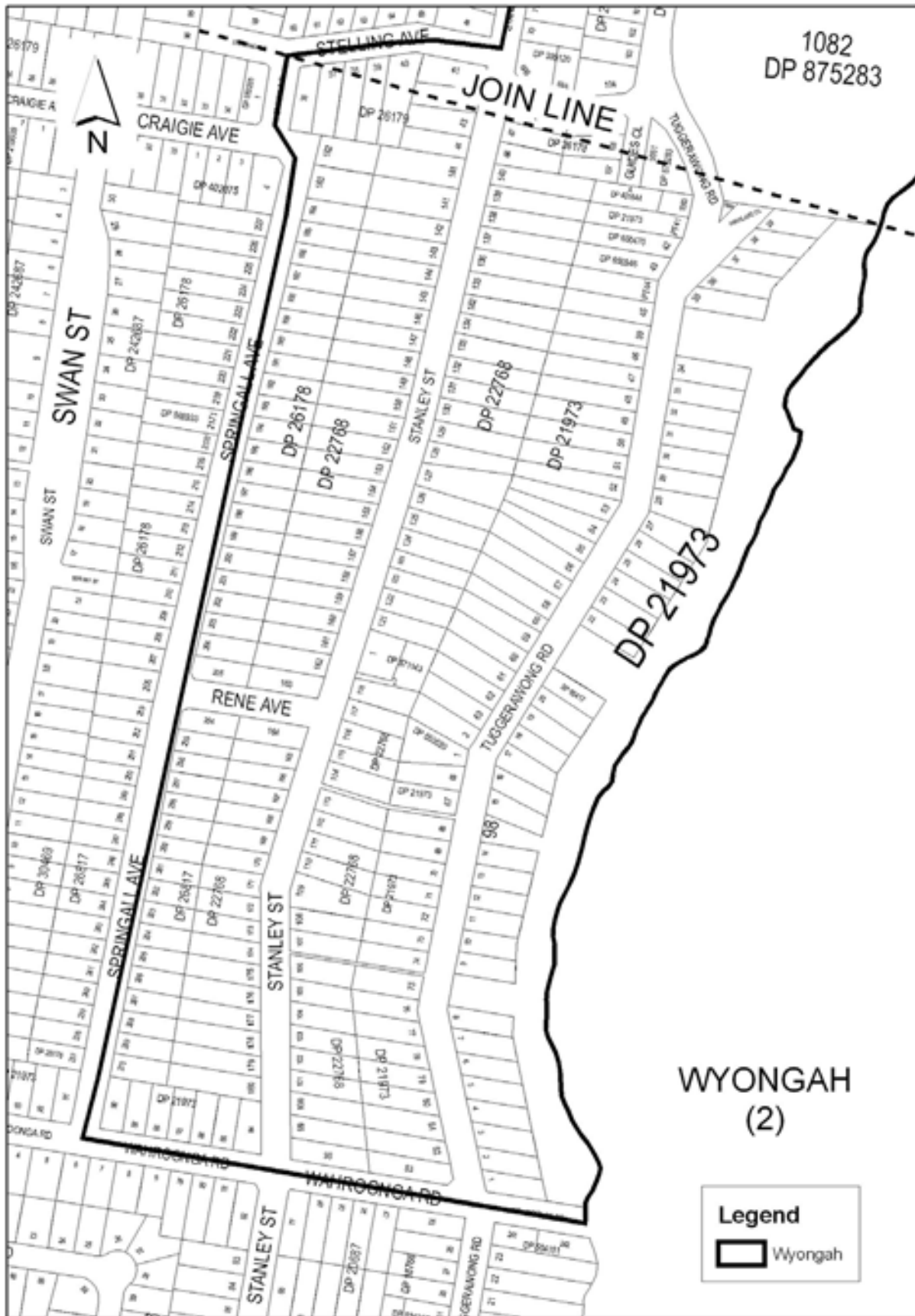
MAP 3 – WYONGAH AREA



MAP 3A – WYONGAH AREA



MAP 3B – WYONGAH AREA



APPENDIX 1

OTHER LEGISLATION APPLYING TO TREE REMOVALS, VEGETATION MANAGEMENT AND CLEARING

Applications for tree clearing and removals will also need to comply with the provisions of other legislation, including but not limited to the following -

- a **National Parks and Wildlife Act 1974** (Schedules 12 and 13) - fauna habitat, protected plants;
- b **Threatened Species Conservation Act 1995** - ecological communities, critical habitat, endangered and vulnerable species, key threatening processes, recovery plans;
- c **Native Vegetation Act 2003** - clearing native vegetation, regional vegetation management plans, property agreements.
- d **Fisheries Management Act 1994** - prohibits cutting of mangroves;
- e **Water Management Act 2000** - A controlled activity approval under the WMA is required for certain types of developments and activities that are carried out in or near a river, lake or estuary (e.g., for the removal of material or vegetation);
- f **Rural Fires Act 1997** - authorised removal of fire hazards;
- g **New South Wales Heritage Act 1977** (Sections 129A and 139) - sites under conservation orders, relics;
- h **Noxious Weeds Act 1993** - clearing of noxious weeds;
- i **State Environmental Planning Policy No 14** - Wetlands;
- j **State Environmental Planning Policy No 26** - Littoral Rainforests;
- k **State Environmental Planning Policy No 44** - Koala Habitat

APPENDIX 2

CLAUSE 28 OF WYONG SHIRE LOCAL ENVIRONMENTAL PLAN (WLEP) 1991

Tree management

- 28** (1) This clause applies to all land within the area of Wyong except -
- (a) land within Zone No. 1(f), including a State forest or other Crown-timber lands within the meaning of the Forestry Act 1916; or
 - (b) land within Zone No. 8(a).
- (2) A person shall not –
- (a) prune or trim (except in accordance with AS 4373 – 1996 ‘Pruning or Amenity Trees’), remove, clear, cut down, destroy, poison, ring bark, lop, top, injure or interfere with any tree or native vegetation without the prior development consent of Council, or
 - (b) cause, permit or authorise the pruning or trimming (except in accordance with AS 4373 – 1996 ‘Pruning of Amenity Trees’), removing, clearing, cutting down, destroying, poisoning, ring barking, lopping, topping, injuring or interfering with any tree or native vegetation without the prior development consent of the Council;
- (3) Notwithstanding subclause (2), consent is not required for -
- (a) the removal or trimming of trees in accordance with the Electricity Supply (Safety Plans) Regulation 1997 or the Electricity (Tree Preservation) Regulation 1995; or
 - (b) the removal or trimming of trees in accordance with section 88, 107, 138 or 139 of the Roads Act 1993; or
 - (c) the removal or harvesting of trees grown commercially or domestically for their edible fruit; or
 - (d) the removal of noxious weeds within the meaning of the Noxious Weeds Act 1993; or
 - (e) the removal of commercially grown plantation trees in accordance with the Timber Plantations (Harvest Guarantee) Act 1995; or

- (f) the removal or clearing of native vegetation authorised (but not exempt) under the Native Vegetation Conservation Act 1997, any other Act or another environmental planning instrument; or
 - (g) the removal of dead trees, except where the trees provide habitat for species listed in Schedule 1 or 2 to the Threatened Species Conservation Act 1995; or
 - (h) the removal of native vegetation on land in any zone to which this clause applies for the purpose of creating or maintaining landscaped and lawn areas where -
 - (i) the work does not involve the removal, injury or destruction of trees; and
 - (ii) the area to be cleared is within the curtilage of a dwelling for which development consent has been granted and is less than 1,000 square metres in total; and
 - (iii) the slope of the land is not in excess of 18 degrees; and
 - (iv) the work does not involve the disturbance of native vegetation which is habitat for species listed in Schedule 1 or 2 to the Threatened Species Conservation Act 1995; or
 - (i) the clearing of native vegetation within urban zones where -
 - (i) the work does not involve the removal, injury or destruction of trees; and
 - (ii) the allotment of land on which the work is proposed has an area of less than 1,000 square metres; and
 - (iii) the slope of the land is not in excess of 18 degrees; and
 - (iv) the work does not involve the disturbance of native vegetation which is habitat for species listed in Schedule 1 or 2 to the Threatened Species Conservation Act 1995; or
 - (j) any works defined as "**exempt vegetation management works**" by this plan.
- (4) The Council shall not grant consent for the works referred to in subclause (2) unless -
- (a) such works are ancillary to or necessary to undertake a use permitted on the land; and
 - (b) the Council has made an assessment of the importance of the vegetation in relation to -
 - (i) soil stability and prevention of land degradation; and

- (ii) water quality and associated eco-systems, such as streams, estuaries and wetlands; and
 - (iii) scenic or environmental amenity; and
 - (iv) vegetation systems and natural wildlife habitats.
- (5) Nothing in this clause affects any requirement made by or under the Native Vegetation Conservation Act 1997.
-

APPENDIX 3

SOURCES OF INFORMATION AND CONTACTS

Information Sheets Available from Council

- a DCP 67: Engineering Requirements for Development
- b Landscape Policy and Guidelines
- c Eco Information Sheets:
 - No. 4** - Pruning Trees in Wyong Shire
 - No. 6** - Bushfire Hazard Reduction Guidelines
 - No. 7** - Wetland Information Sheet
 - No. 8** - Tree Planting in Urban Areas
 - No. 10** - Balancing Tree Preservation with Development Application Requirements
 - No. 22** - Integrated Developments
 - No. 24** - Tree Species Suitable for Planting
 - No. 26** - Choosing an Arborist
 - No. 54** - Consent Requirements for Tree Applications

Contact Phone Numbers and Addresses

Wyong Shire Council

Phone: (02) 4350 5555
Fax: (02) 4351 2098
Address: PO Box 20 WYONG NSW 2259

Department of Environment, Climate Change and Water (DECCW) - Newcastle

Phone: (02) 4908 6800
Fax: (02) 4908 6810
Address: PO Box 488G NEWCASTLE NSW 2300

Department of Environment, Climate Change and Water (DECCW) (National Parks and Wildlife Service)

Central Coast

Phone: (02) 4320 4200
Fax: (02) 4320 4299
Address: PO Box 1477 GOSFORD NSW 2250
Email: central.coast@environment.nsw.gov.au

Sydney (Hurstville)

Phone: (02) 9585 6444
Fax: (02) 9585 6555
Address: PO Box 1967 HURSTVILLE NSW 1481
Email: info@environment.nsw.gov.au

Department of Water and Energy - Newcastle

26 Honeysuckle Drive Newcastle NSW 2300
PO Box 2213 Dangar NSW 2309
t: (02) 4904 2500
f: (02) 4904 2501

National Arborists Association of Australia

Phone: (02) 4739 4339
Fax: (02) 4739 4361
Address: PO Box 187 BLAXLAND NSW 2774
Email: nat.arborists@optusnet.net.au

Wildlife Information and Rescue Service (WIRES)

Phone: (02) 4323 2326
Address: PO Box 464 WYONG NSW 2259
Email: info@wires.org.au

Wildlife Animal Rescue and Care (ARC)

Gosford

Phone: (02) 0500 551 121
Address: PO Box 2308 GOSFORD NSW 2250

Our Ref: DA/2660/2004

24 September 2009

Terrigal Grosvenor Lodge Pty Ltd
PO Box 296
THE ENTRANCE NSW 2261

Development Application Notice of Determination

Issued under the Environmental Planning and Assessment Act 1979
Section 80(3)

Development Consent No:
Property Address:

DA/2660/2004
Lot 1 and 2 DP 517291, Lot A, C, D DP 382461
Lot 1 DP 25611, Lots 1, 2, 3, 4, SP 20363
Lot 151, DP1078873, Lot 5, DP 790801
Lot 1, 2, 3 DP 571197, Lot 10, 11, 12, DP 23428
Lot 1, 2, 3, 4, DP 367602, Lot 13, DP 23428
Lot 4, DP 326711, Part Lot 7 DP 23196

That part of Oakland Avenue between the northern boundary of Bent Street and southern boundary of The Entrance Road.

That part of The Entrance Road extending 10m north of the northern boundaries of the subject allotments fronting The Entrance Road including the extension of the 10m line across the Oakland Avenue intersection.

That part of the Entrance Road extending 10m north of the northern boundaries of the subject allotments fronting The Entrance Road

Description of Development:
Determination:
Determination Date
Deferred Commencement
Consent to Lapse on
Consent to lapse on:

Managed resort facility known as The Entrance Resort
DEFERRED COMMENCEMENT
2009
2011

Two years from the date the consent becomes operational

Schedule A

In accordance with Section 80(3) of the Act this consent will not operate until the applicant has provided information to the satisfaction of the Consent Authority to address the matters specified in the conditions of Schedule A. Upon receipt of written information from the applicant in relation to the conditions in Schedule A, the Consent Authority will advise in writing whether the information is satisfactory and, if so, will nominate the effective date for the commencement of this consent.

In accordance with Clause 95(3) of the Regulation, a twenty four (24) month period is given from the date of the 'deferred commencement' notice to lodge plans and information that satisfactorily address the required Schedule A conditions, otherwise the 'deferred commencement' will lapse.

Comprehensive Staging Plan

- 1 Preparation and submission of plans and information comprehensively detailing the proposed staging of the development to incorporate but not limited to the following:
 - a Timing of the relocation of the existing infrastructure utility services (Telstra, water mains, sewers, electricity), and the construction of all new utility services and sewer main upgrade works as required by the relevant authority.
 - b Provision of a plan of management identifying alternate pedestrian and vehicular access during construction including at the completion of each suggested stage of the development (and ensuring access to surrounding properties and for emergency vehicles and access to the lake foreshore);
 - c Timing for road closures (and construction of proposed new public road on the eastern side and stormwater systems including overland flow path/s);
 - d Groundwater analysis demonstrating treatment of and the discharge through each stage of the development as well as, impacts on the significant and iconic Norfolk Island Pines and Fig Trees;
 - e Foreshore improvement works and restoration of seawall;
 - f Ensuring the development will maintain compliance with Clause 68 of the LEP for a Managed Resort Facility.
 - g During construction works safe and direct pedestrian and vehicular access must be maintained at all times from Oakland Avenue to the foreshore area, wharf, boat shed and The Entrance Hotel.

BASIX

- 2 Issue of BASIX Certificates for each residential building (Class 2) within the development.

Plan Amendments

- 3 Amendment to the plans to improve the useability and amenity of recreational facilities within the development:

- a Raise the outdoor resort pool and children's water playground and associated facilities in the resort courtyard from basement levels to natural ground level on the eastern site;
- b Deletion of the four basement level tourist units (as these will be underground with raising of the pool level);
- c Relocation of the child minding centre from the basement level to the ground level;
- d Raise the outdoor pool, landscape and BBQ terrace area from the basement to the ground floor level on the western side of the site (containing the permanent residential development).

Traffic and Transport - External Works

- 4 A letter of endorsement is required from the Roads and Traffic Authority stating that the property boundary for the proposed Bent Street extension to The Entrance Road (adjacent to Wilfred Barrett Drive) is acceptable. Any adjustments required to the development to conform with the requirements of the RTA are to be carried out and identified in a revised plan which is to be submitted to Council for approval.
- 5 Traffic analysis is to be carried out to identify the extent of queuing likely to occur at the development entry roundabout in Oakland Avenue. If the queuing extends back into the roundabout, then an alternative treatment to the entry is to be submitted to Council for approval.
- 6 A Servicing Management Plan is to be submitted and approved by Council. The plan shall state that there is to be no servicing of any part of the proposed development from any access (excepting emergency and maintenance), that may be provided along the foreshore area. Servicing of the retail areas fronting The Entrance Road foreshore is to be identified in the Management Plan.
- 7 A plan showing details of the swept paths, indicating that the design will permit servicing of the development by a large rigid vehicle (LRV, 14.5 metre long) is to be submitted for Council approval. This shall include servicing for the Bent Street loading dock and access to the proposed public road.
- 8 The adequacy of the sight distance for vehicles egressing the carpark in the proposed Public Road is to be assessed by a practicing Traffic Engineer (Member of AITPM) to Council's requirements. Any changes to the development required to provide adequate sight distance must be submitted to Council for approval.
- 9 A plan is to be submitted showing a pedestrian pathway (minimum 1.5 metres wide) from the Convention Centre entry to the footpath proposed in Wilfred Barrett Drive. Any changes required to the development in order to provide this footpath are to be shown on the plan.

Traffic and Transport - Internal Works

- 10 Certification from a practicing Traffic Engineer (Member of AITPM) that the parking areas/layouts, access arrangements, ramps, grades (including rates of change), height clearance etc conform to AS/NZS 2890.1 & 2 is required prior to proceeding to the Construction Certificate stage. Any adjustments required to the building design for the development to conform to AS/NZS 2890.1 & 2 are to be identified on the plans, with applicable corrections made for Council approval. The location of supporting columns and structures within the carparks shall not reduce the number of parking spaces within the development as identified on the plans prepared by Thrum Architects and dated 17.4.09 or March 2009.
- 11 In order to provide adequate vehicle egress a second vehicle egress is to be provided from the Lower Ground Floor Level – east. A plan showing details of the egress is to be submitted for Council approval. Any changes requested by Council are to be incorporated into a revised plan.
- 12 A plan prepared by a practicing Traffic Engineer (Member of AITPM) is required to identify the turning paths required for the service vehicles for the Lower Ground Floor West. The size of the maximum vehicle required to service the development is to be identified.

Pedestrian Access

- 13 A public reserve 3 metres wide to allow a shared pathway (pedestrian pathway) along the western boundary of the property is required. It is to be contained partly within the existing 2.0 metres wide drainage reserve (Lot 13 DP 23428). Dedication of a 1.0 metre wide strip of land is required along the western boundary to accommodate the pathway. A concrete pathway 2.5 metres wide is to be constructed within the designated pathway area. A plan showing this public pathway is to be submitted to Council for approval. Any changes requested by Council are to be incorporated into a revised plan. The land required for the public pathway along the western boundary is to be dedicated as part of Stage 1 of the development.

Groundwater Management Plan (GMP)

- 14 A Groundwater Management Plan (GMP) is to be prepared by a suitably experienced and qualified Engineer (specialising in groundwater with NPER registration or equivalent demonstrated experience) and approved by Wyong Shire Council. The GMP is to incorporate and consider the following targets and issues.
 - i The GMP is to demonstrate that no impacts on groundwater levels, gradients and seasonal fluctuations will occur within adjacent properties and infrastructure as a result of the development.
 - ii The methodology, modelling and justifications will need to demonstrate that upstream and adjacent building basement levels will not have any additional groundwater impacts as a result of the development.

- iii No mature tree roots are to become saturated or any adverse effects upon their wetting and drying cycles. Arborist advice is to be obtained regarding the potential impacts on the stability and vulnerability of the trees to be retained (on the site adjoining foreshore) due to the change in the quantity and quality of groundwater in the area resulting from the development. The arborist advice is to include the means of maintaining the wetting and drying regime of the trees in order to ensure their health.
- iv The GMP methodology shall incorporate a suitable 3D modelling approach to assess the impacts of the development on the existing groundwater flow lines including the consideration of the impacts of climate change on the groundwater. The model shall also include the de-watering processes during the various stages of construction and ongoing dewatering if required.
- v If groundwater mitigating measures are to be introduced as part of the GMP, justification and approvals from the relevant government agencies are required. The mitigation works shall not impact on Tuggerah Lake, adjacent properties and infrastructure or the surrounding environment, (ie. water quality extractions and subsequent discharges into Tuggerah Lake, logistics of the dewatering process including odour, hours of operation and noise of equipment).
- vi A monitoring system is to be incorporated into the GMP to ensure the assumptions, measures and maintenance of the GMP is achieving the specific targets set out above. Regular readings are to be recorded for a 10-year period in an appropriate format for submission to Wyong Shire Council on request. The frequency and nature of these readings will be based on the guidelines and specification as outlined within the GMP.
- vii Relevant approvals are to be obtained from Department of Environment Climate Change and Water (DECCW) or other NSW government agencies for the implementation of the GMP. Documentation of approvals and/or permits are to be presented to the Wyong Shire Council.

Road Construction Plans

- 15 Road construction plans for the proposed regrading of Bent St and provision of the new 'eastern' access road are to be prepared by a suitably experienced and qualified Civil Engineer (with NPER registration or equivalent demonstrated experience) in accordance with Council's DCP Chapter 67 Engineering Requirements for Development and Draft DCP Chapter 97, Water Sensitive Urban Design, Australian Rainfall and Runoff design guidelines and NSW Floodplain Development Manual and are to be approved by Wyong Shire Council under the Roads Act 1993. The Roads Act application will need to;
- i Obtain the relevant approvals from all service utility authorities for main and cable adjustments,(eg rising sewer main and telecommunication cables);
 - ii Ensure adjoining driveway crossing adjustments are retained wholly within the Bent Street road reserve. The applicant must ensure and demonstrate that all adjoining property owners affected by the proposed works have been consulted.

- iii Ensure the Flood Study objectives are satisfied, including the modelling of the proposed Bent Street floodway to establish revised 100-year ARI flood levels for the final road design.
- iv Ensure overland flows are safe for pedestrians and vehicles within the road carriageway and street footway areas from Oakland Avenue and The Entrance Road to Tuggerah Lake.
- v Ensure that there are no permanent obstructions to the flow path within Bent Street and the Bent Street extension to the Tuggerah Lake foreshore. (ie, fencing, landscaping etc)

Flooding and Climate Change

- 16 A Flood Study is to be prepared by a suitably experienced and qualified Flood Engineer (with NPER registration or equivalent demonstrated experience) to the satisfaction of Wyong Shire Council outlining methodology, assumptions and flood results that describes the existing and post development scenarios of the local external catchment. The Flood Study will be prepared in accordance with Council's Flood Prone Land Development Policy, NSW Floodplain Development Manual and Wyong Council's DCP Chapter 67, Australian Rainfall and Runoff design guidelines and the draft Climate Change Policy and will need to:-
- i Illustrate the existing and post-developed 100-year ARI and PMF flows and flood levels that affect the subject site and the surrounding adjacent properties. The study shall demonstrate that the post-developed 100-year ARI and PMF flows and flood levels, do not impact existing flooding conditions for adjacent properties, including all the proposed local overland flowpaths that traverse and fringe the development.
 - ii The inclusion of the 2 ha area of catchment above the intersection of Fairview Avenue and The Entrance Road.
 - iii PMF Flows shall be estimated using Book 2 (Design Rainfall Considerations) and Book 6 (Estimation of Large and Extreme Floods); Australian Rainfall and Runoff (ARR).
 - iv The hydrological analysis of the catchment is not to include unlimited inlet capacity of pits upstream of Bent Street. The inlet capacities at these locations shall be detailed and supported by calculations.
 - v Incorporate the redesigned final road vertical alignment for Bent Street that forms part of the Roads Act approval.
 - vi Ensuring that the regrading of Bent Street and the closure of Oakland Avenue will not impact upon adjacent properties in all storm events up to and including the PMF storm event.
 - vii The available waterway width in Bent Street shall be reviewed to take account of power poles, street furniture and parked cars which could obstruct flows, particularly during the PMF event.

- viii A 300mm freeboard allowance shall be included into the flood level modelling of the Bent Street flowpath, for the 100 year ARI event, including the flow superelevation at the two bends proposed.
- ix Ensure that all pedestrian ramps, stair ways, openings and ventilation points, that lead into:-
 - o an underground or basement carpark,
 - o amusement and entertainment void, and
 - o any level below RL2.50AHD that does not freely drain to the natural surface level at the development boundary

have a 500mm freeboard above the estimated 100-year ARI storm event and is not inundated in the PMF event. In many cases suitable flood protection measures will need to be implemented.

- x Ensure that all flow velocities and depths within floodways and local overland flowpaths, external and on site, are limited to the requirements of the NSW Floodplain Development Manual 2005 in relation to vehicular and pedestrian movements and stability.
- xi Demonstrate that all floodways and local overland flowpaths through the development during a PMF event can be managed so as not to compromise the safety of the public and staff in accordance with the Floodplain Development Manual and best practice.
- xii Confirmation that the finished surface levels within the foreshore area and the proposed site boundary are retained unaltered to those existing.
- xiii The proposed diverted overland flows via Bent Street to the foreshore areas shall be treated to ensure impacts are minimised on the nearby boatshed facilities, Fisherman's Wharf complex and pedestrian/foreshore area.
- xiv The architectural plans are to be revised to incorporate necessary changes arising from the Flood Study. The author of the Flood Study is to confirm the plans have been amended in accordance with the flood study prior to their submission to the Consent Authority
- xv A Climate Change Risk Assessment Report shall be prepared on the identified risks associated with flood inundation, high intensity rain fall and sea level rise. Inclusion of the impacts of Climate Change into the flood and stormwater management provisions of the development are to ensure that no increased risk of human harm or death is possible as a result of these likely impacts from acute flooding events (large infrequent storms) and from chronic flooding (small frequent storms and groundwater).

Climate Change implications can be based on the predictions and modelling completed by HCCREMS and DECC and Council's requirements. This report shall include the following:

- Sea level rise, increased inundation, increased wave attack, groundwater and storm surges;
- Increased rainfall intensities;
- Stormwater systems including overland flow path/s freeboards to basement car parks.
- A strategy to provide long term protection of the development and the replacement/reinstatement of potential damaged areas.
- Engineering plans detailing basement access ramp flood protection gates (self closing flood barrier, warning signage, emergency lighting and manufactures specifications.
- Impacts on water and sewer infrastructure and methods of mitigating such adverse impacts.

Evacuation Management Plan

- 17 An Evacuation Management Plan (EMP) is to be prepared by a suitably qualified and experienced Flood Engineer (with NPER registration or equivalent demonstrated experience) and approved by Wyong Council outlining methodology and assumptions in the event of flood inundation of the site. The EMP will also need to demonstrate:-
- i methods of protection and strategies of warning/evacuation to deal with the safety issues arising from flood liable areas throughout the development,
 - ii the effectiveness of any identified evacuation routes and storage areas for both vehicles and pedestrians and,
 - iii assumed travel times of vehicles and pedestrians in relation to schedule of alerts identified as part of the EMP.

Foreshore Promenade Works and Public Art

- 18 A Prepare a masterplan for the public foreshore area in consultation with Council and the community. The plan for the public foreshore area is to:
- ii. Encourage incidental exercise, social interaction of all ages and provides a variety of innovative settings for recreation.
 - iii. Recognise and maintain existing recreation activities in appropriate settings with adequate separation within the public foreshore area.
 - iv. Maintain a clear flow path and appropriate facilities for the Tuggerah The plans shall include specifications for furniture, fencing, barriers and all garden treatments. Irrigation reticulation and sub-surface drainage systems shall also be detailed.
 - v. Make provision for a future cycleway and pedestrian access to and from any future duplication of The Entrance bridge.
 - vi. The Plan shall incorporate “Safer By Design” Principles.

- vii. Provide public toilets and recreational facilities (including fish scaling tables)
- viii. Make plans for the ongoing management and succession of the iconic planting in the foreshore.

All works nominated within the masterplan for the foreshore promenade are to be approved by Wyong Council and be consistent with The Entrance Peninsula Planning Strategy and Town Centre Masterplan.

- B. Prepare a public art masterplan incorporating a final design concept for public art work/s in consultation with Council that integrates public art throughout the public foreshore area at the applicant's cost. The public art work/s along the foreshore shall be planned for, designed, approved and implemented in accordance with the provisions of Council's *draft* Public Art Development Control Plan 2005 Chapter 112.

Note: Approvals/agreement of various government agencies including Council as landowner are to be obtained for seawall restoration works and foreshore reserve works.

Water Supply and Sewerage Information

- 19 Provision of a schedule for the volume of all pools, spas and water features proposed to be located within the development and existing on the site. This is required to enable calculations of applicable water supply and sewerage contributions.

Schedule B

Upon compliance with the conditions of deferred commencement and written notification by the Consent Authority, the consent shall become operative subject to the following conditions of Schedule B.

Approved Plans

- 1 The development is to be undertaken in accordance with the approved Architectural plans numbered 679 –
 - DA-000/03F dated March 2009
 - DA-000/04D dated March 2009
 - DA-000/05A dated 17/4/09
 - DA-000/06A dated 17/4/09
 - DA-001/01F dated 17/4/09
 - DA-001/02E dated 17/4/09
 - DA-001/03A dated 17/4/09
 - DA-001/04E dated 17/4/09
 - DA-001/05B dated 17/4/09
 - DA-001/06E dated 27/2/08
 - DA-001/07C dated 17/4/09
 - DA-001/08C dated 17/4/09
 - DA-001/09C dated 17/4/09
 - DA-001/10C dated 17/4/09

- DA-001/11C dated 17/4/09
- DA-001/12C dated 17/4/09
- DA-001/13 dated 17/4/09
- DA-001/14 dated 17/4/09
- DA-001/15A dated 17/4/09
- DA-002/01E dated 17/4/09
- DA-002/02F dated 17/4/09
- DA-002/03I dated March 2009
- DA-002/04H dated March 2009
- DA-002/05H dated March 2009
- DA-002/06G dated March 2009
- DA-002/07G dated March 2009
- DA-002/08F dated March 2009
- DA-002/09F dated March 2009
- DA-002/010F dated March 2009
- DA-002/11E dated March 2009
- DA-002/12C dated March 2009
- DA-002/13C dated March 2009
- DA-002/14D dated March 2009

all prepared by Thrum Architects, except as modified by any conditions of consent and any amendments in red, all supporting documentation submitted as part of the development application, and the development is to be carried out in accordance with the General Terms of Approval issued by the Department of Infrastructure, Planning and Natural Resources (currently known as the Department of Water and Energy) dated January 2005 (reference ER6193) as attached to these conditions of consent."

Prior to Release of Construction Certificate:

The following conditions must be satisfied prior to the release of the Construction Certificate. Conditions may require the submission of additional information with the Construction Certificate Application. Applicants should also familiarise themselves with conditions in subsequent sections and provide plans in accordance with any design requirements contained therein.

Acid Sulphate Soils

- 2 Submission to the Consent Authority of an Acid Sulphate Soil Investigation and Management Plan, prepared by a suitably qualified person, prior to issue of the Construction Certificate.

Certificates/Engineering Details

- 3 A Construction Certificate is to be issued by the Principal Certifying Authority prior to commencement of any works. The application for this Certificate is to satisfy all of the requirements of the Environmental Planning and Assessment Regulation 2000.

- 4 A Construction Certificate application for this project is to include a list of fire safety measures proposed to be installed throughout the development. Should Council not have any record of the existing fire safety measures in the building or on the land a separate list of these existing fire safety measures is to be submitted. The lists must describe the extent, capability and basis of design for each measure prior to the issue of a Construction Certificate.
- 5 Satisfactory structural plans prepared by a suitably qualified Structural Engineer must be submitted to the Principal Certifying Authority for the structural aspects of the development prior to the issue of a Construction Certificate.

Construction

- 6 Any excavation below the adjoining land level requires the retaining of that land and the preservation and protection of any improvements or buildings to that land including public roads and utilities from damage. If necessary the improvements or buildings are to be supported in a manner designed by a practicing structural engineer. Design proposals are to include geotechnical investigations and are to be submitted to the Principal Certifying Authority/Council prior to issue of the Construction Certificate. The owner of adjoining properties must be given written notice of the intention to commence works and details of the proposal a minimum of seven days prior to the start of works.

Contributions

- 7 Prior to the issue of a Construction Certificate, the payment to Council of contributions (as contained in the attached Schedule) applicable to each relevant stage under Section 94 of the Environmental Planning and Assessment Act and Council's Contribution Plan. Council's contributions are adjusted on the first day of February, May, August and November. The amount of the contributions will be adjusted to the amount applicable at the date of payment.

Water and Sewer Services/Infrastructure

- 8 The obtaining of a Certificate of Compliance under the Water Management Act 2000 for water and sewer requirements at each stage of the development from Wyong Shire Council as the Water Supply Authority. Design plans are to be approved by Council prior to the issue of a Construction Certificate.

Dilapidation

- 9 The applicant must supply the Consent Authority with a dilapidation report prepared by a suitably qualified building consultant for the adjoining properties, which documents and photographs the condition of buildings and improvements within a 120 metre distance from the subject development boundary. The report must be submitted to and approved by the Consent Authority prior to issue of a Construction Certificate and will be made available by the Consent Authority in any private dispute between the neighbours regarding damage arising from site and construction works.

- 10 A dilapidation report must be submitted to Council as the Roads Authority prior to the commencement of any works. The report must document and provide photographs that clearly depict any existing damage to the road, kerb, gutter, footpath, driveways, water supply, sewer works, street trees, street signs or any other Council assets in the vicinity of the development. Should this information not be submitted it will be assumed that any damage to these areas at the completion of the development is due the construction works and the builder/owner will be responsible for the rectification of these areas.

Erosion and Sediment Control – Building Sites

- 11 Prior to the issue of a Construction Certificate, the submission to the Principal Certifying Authority of design plans for the control of soil erosion on the site and the prevention of silt discharge into drainage systems and waterways in accordance with Wyong Shire Council's Development Control Plan 2005 – Chapter 67 – Engineering Requirements for Development or Soils and Construction – Managing Urban Stormwater (Blue Book). Details are to include all major stages of construction and sequences of work together with treatments necessary at these stages. The design plans must be approved by the Principal Certifying Authority or an appropriately Accredited Certifier prior to issue of the Construction Certificate.
- 12 Prior to the issue of a Construction Certificate, the submission to the Principal Certifying Authority of a Soil and Water Management Plan (design plans) for the control of soil erosion on the site and the prevention of silt discharge into drainage systems and waterways in accordance with Council's Policy E1 - Erosion and Sediment Control from Building Sites or "Soils and Construction – Managing Urban Stormwater" (Blue Book) The design plans prepared by a Certified Professional in Erosion and Sediment Control (CPEC) shall be approved by the Principal Certifying Authority or an appropriately Accredited Certifier prior to issue of the Construction Certificate.

Filling and Haulage

- 13 Prior to the issue of a Construction Certificate, the submission to and approval by the Consent Authority (including the RTA) of details for the disposal of any spoil gained from the site and / or details of the source of fill, heavy construction materials and proposed routes to and from the site.
- 14 All fill is to be placed on site in such a manner that surface water will not be diverted to adjoining land and so that natural drainage from adjoining land will not be obstructed or affected.

Food Act Requirements

- 15 Prior to the issue of a Construction Certificate, detailed plans and specifications for the food handling areas are to be submitted to and approved by Council's Environmental Health Officer- Food.

SEPP 65

16 The certifying authority must not issue a Construction Certificate for residential flat development unless the certifying authority has received a design verification from a qualified designer, being a statement in which the qualified designer verifies that the plans and specifications achieve or improve the design quality of the development for which development consent was granted, having regard to the Design Quality Principles set out in Part 2 of State Environmental Planning Policy No 65 - Design Quality of Residential Flat Development.

17 The staging of the construction works for the development are to include the following:

Westside

- a Construction of the ramps to and from Clifford Street and Oakland Avenue, to the basement parking, are to be concurrent with construction of the Westside basement and ground floor construction, and prior to construction of any apartment buildings.
- b Access to Clifford Street and Oakland Avenue residential apartments and retail/commercial areas are to be available during construction of the buildings above.
- c Transfer of the title for, and construction of the proposed public road (next to Wilfred Barrett Drive) is to be prior to the transfer of title of Oakland Avenue to TGL (Terrigal Grosvenor Lodge).

Eastside

- d Construction of the ramps to and from Bent Street, the proposed public road and Oakland Avenue, to the basement parking, are to be concurrent with construction of the Eastside basement and ground floor construction, and prior to construction of any apartment buildings.
- e Access to Bent Street, the proposed public road and Oakland Avenue, for the residential apartments and retail/commercial areas are to be available during construction of the buildings above.

Heritage

18 The development is to be carried out in accordance with the submitted heritage report prepared by City Plan Heritage dated November 2004 and as amended by Council's heritage consultants advice as follows:

- i. Any collapsed building fabric resulting from excavation under the heritage building is to be reinstated. The existing footings of all brick walls are to be structurally supported during the new work and any excavation is to be setback from the wall lines for a distance of 1 metre.

- ii. As a minimum the central core square (ie. primary square component) of the existing building is to be retained with appropriate interface between this and new works in material, scale and proportion. The upper floor to the southern side - which forms the external element of this 'square' should be retained with appropriate openings (these being less than the retained wall area).
- iii. The existing 'simple pyramid' roof structure directly over the primary square of the existing building footprint be retained, including retention of the glazed roof tiles depending on their condition.
- iv. New ground floor openings should retain the form, detail and finishes of the existing building. Window openings to the upper floor on the east, north and south elevations should be retained with limited new openings where entry is required to the southern side.

Landscape Plan

- 19 A category three (3) landscape design documentation (in accordance with Council's Landscape Policy) is to be submitted to Council prior to issue of a Construction Certificate that will include trees, shrubs and groundcovers. All trees are to be nominated as 75 litre and shrubs 25 litre. The landscape plan is to show species on the plan, amount and location. Trees to be retained and trees that are earmarked for removal are to be listed within the landscape plan. The trees are to be numbered and shown on a plan. This plan and tree numbering will then be used by the onsite arborist for the basis of an arborist report.

Norfolk Island Pines

- 20 The row of Norfolk Island Pines (*Araucaria heterophylla*) and fig trees located on the foreshore that would be affected by the proposed works are to be retained. Due to road/paving works that will occur within the Critical root Zone (C.R.Z) of several Norfolk Island Pines, an arborist report is to be submitted prior to issue of a Construction Certificate demonstrating retention methods for the trees including the *Araucaria heterophyllas* and the *Ficus rubiginosas*. Tree protection must include 1.8 metre high chainwire fencing around each tree. Construction methods should have a low impact on the trees and all paving methods should be porous to allow water infiltration. The arborist report must also address tree protection methods within the CRZ in accordance with Council's DCP Chapter 67 and 14. The AQF5 arborist shall determine the minimum and maximum setback distance where no works shall occur. The swails/drains diverting water to the Norfolk Island Pines must ensure adequate water is being diverted to the C.R.Z area. The arborist report will need to consider the altered Ph levels due to concrete being poured in underneath the walkway area that is within the C.R.Z. of the tree.

Arborist report

- 21 An arborist report is to be submitted to council that outlines all trees that exist on site that are over three metres in height and/or come under the requirements as set out within DCP Chapter 14 2005 prior to the issue of a Construction Certificate.

Trade Waste

- 22 The submission of a trade waste application and subsequent approval by Council to discharge trade waste into the sewerage system, for each of the dischargers (eg. restaurant, café, carwash, laundry), prior to issue of the Construction Certificate.

Acoustic Report

- 23 The submission of an acoustic report prepared by a suitably qualified person to Council prior to the issue of the Construction Certificate which addresses potential noise sources resultant from the operation of the development. This shall include, but not be limited to, the design of the convention rooms, including building elements and required sound locks, mechanical plant, carpark exhaust, supply fans and construction noise. The report shall also investigate the expanded use of Bent Street and noise impacts on surrounding residential properties. Furthermore, the report must address but not be limited to traffic speed and road surface construction methods. The plans accompanying the Construction Certificate application shall address and reflect the recommendations of the Acoustic Report.

BASIX

- 24 Pursuant to the requirements of the Environmental Planning and Assessment Regulation 2000, all BASIX commitments required for the release of the Construction Certificate are to be shown on the plans and specifications for the development

Traffic and Transport

- 25 The RTA and Council shall assess and endorse the final engineering design plans for the reconstruction of Bent Street and the proposed new road along the western alignment of the Entrance Bridge in regards to their requirements for the future duplication of the Entrance Bridge prior to the issue of the Construction Certificate. Documentation detailing the acceptance of the design by the RTA shall be submitted to Council prior to the issue of any Construction Certificate.
- 26 A pedestrian refuge is to be constructed in Wilfred Barrett Drive, in the vicinity of Bent Street to Council's and the RTA's requirements. Alternatively, the RTA may request fencing along Wilfred Barrett Drive to prevent pedestrians crossing Wilfred Barrett Drive between Coral Street and the Wilfred Barrett Bridge. This is to be determined by the RTA prior to issue of Construction Certificate. A letter of endorsement is required from both Council and the Roads and Traffic Authority.
- 27 The developer is to enter into a Deed of Agreement with the RTA and Council for any external roadworks and shared pathways prior to the issue of any Construction Certificate for any part of the development.
- 28 All pedestrian crossings (shown on Drawing DA-000/03F - Bent Street, Oakland Avenue, Proposed Public Road) are to be raised marked pedestrian crossings with kerb blisters or alternative treatments identified. Any changes to the raised marked pedestrian crossings are to be identified on a plan submitted to Council for approval prior to issue of any Construction Certificate.

- 29 Prior to issue of any Construction Certificate, a plan is to be submitted identifying a future cycleway connection from the western side of a future duplicated The Entrance (Wilfred Barrett Drive) Bridge to The Entrance Road foreshore. The plan is to be submitted to both Council and the RTA for approval. Any changes requested by either the RTA or Council are to be incorporated into a revised plan. The plan requires approval by Council prior to issue of any Construction Certificate. No significant improvements that will prevent the connection in the future are to be constructed in this location.
- 30 Clifford Street is to be reconstructed (to carry the future anticipated traffic flows to Council's requirements) and upgraded with kerb and gutter both sides with a minimum carriageway width of 6.5 metres. Concrete pedestrian footpaths (minimum 1.2 metres wide) are to be provided on both sides of the carriageway. Plans for the upgrading of Clifford Street are to be submitted to Council for approval. The plan requires approval by Council prior to issue of any Construction Certificate.
- 31 Prior to issue of any Construction Certificate, a plan showing details of proposed treatment of The Entrance Road adjacent to the development (including kerb and gutter) is to be submitted for Council approval. The plan is to identify any staging of the works and include emergency and maintenance vehicles access and servicing of the wharf and boat shed to Council's satisfaction.
- 32 Two percent (2%) of the total number of parking spaces (public and private) are to be identified and suitably sized (in accordance with AS standards) for disabled parking. The parking spaces are to be located close to all access points. The size of the parking spaces are to be in accordance with AS/NZS 2890 Part 1. A plan showing the location and size of the disabled parking spaces is to be submitted for Council approval. The plan requires approval by Council prior to issue of Construction Certificate.
- 33 All parking on Lower Ground Levels – EAST and WEST are to be for public parking. Revised plans demonstrating this are to be submitted to Council for approval. The plan requires approval by Council prior to issue of any Construction Certificate.
- 34 Facilities are to be provided for the parking of a minimum 30 bicycles. The facilities are to be spaced throughout the development and provided in the form of racks in appropriate, well lit and sheltered locations protected by passive surveillance and/or CCTV. A plan identifying the location and details of the bicycle racks is to be submitted for Council approval. The plan requires approval by Council prior to issue of Construction Certificate.
- 35 A plan showing details of splitter islands for the roundabout at the entry to the eastern and western developments is to be submitted for Council approval. Any changes requested by Council are to be incorporated into a revised plan. The plan requires approval by Council prior to issue of Construction Certificate.
- 36 Prior to issue of Construction Certificate, a plan prepared a practicing Traffic Engineer (Member of AITPM) by showing all signage, linemarking and any additional facilities required to safely delineate traffic movements external to and within the carparks is to be submitted to the Local Traffic Committee for consideration and approval by Council. Any changes to the plans including placement of medians etc required to rationalise/make safe all traffic movements are to be incorporated in a revised plan. The plan is to be approved by Council prior to issue of the Construction Certificate.

- 37 The swept path of heavy rigid vehicles (HRV's) are to be shown for the Oakland Avenue/Bent Street and the proposed Public Road/The Entrance Road intersections, identifying that the vehicles can maintain lane discipline. Any alterations to the development layout in order to achieve this are to be identified on a plan submitted for Council's approval. Any changes requested by Council are to be incorporated into a revised plan. The plan requires approval by Council prior to issue of Construction Certificate.
- 38 A plan showing appropriate "No Entry" signs for ramps and/or one-way traffic arrangements within the carparks is to be submitted for Council approval. Any changes requested by Council are to be incorporated into a revised plan. The plan requires approval by Council prior to issue of Construction Certificate.

Traffic Management

- 39 The provision of traffic management facilities throughout the development in accordance with Development Control Plan 2005, Chapter 67 - Engineering Requirements for Development. Design plans must be approved by the Principal Certifying Authority prior to issue of a Construction Certificate.

Plan of Management

- 40 The submission of a plan of management to Council for approval under the Roads Act/Local Government Act for any works for the development that impact on any public roads or public land for the construction phase of the development, prior to that section of work commencing. The plan is to include a Traffic Control Plan and/or a Work Method Statement for any works or deliveries that impact the normal travel paths of vehicles, pedestrians or cyclists or where any materials are lifted over public areas. This plan must be certified by an appropriately accredited/qualified person.

Road Closure

- 41 All proposed road closures shall be supported by current survey information, engineering plans and details showing all necessary utility relocation and adjustments and a comprehensive staging timetable of the proposed closures. Note: All costs legal and advertising associated with the closures shall be borne by the applicant.
- 42 A cul-de-sac is to be constructed at the north western end of The Entrance Road prior to the commencement of excavation works for the west side basement carpark. Engineering plans are to be designed in accordance with DCP Chapter 67 and approved by the Consent Authority prior to the issue of the Construction Certificate.

Road Dedication

- 43 All roads are to be constructed and dedicated up to the boundaries of all adjoining properties prior to the issue of a Subdivision Certificate for consolidation. Details shall be incorporated in the final plan of subdivision.

Groundwater

- 44 The recommendations of the accepted GMP required under the Deferred Commencement conditions are to be complied with as part of the development. Certification is required to verify that all hydraulic modelling, subsequent management strategies, detail designs and mitigating measures satisfy all relevant DCPs, Council's policies, industry guidelines, development consent targets and best management practice prior to the issue of any Construction Certificate.

Flood Study

- 45 The recommendations of the accepted Flood Study required under the Deferred Commencement conditions are to be complied with as part of the development. Certification is required to verify that all hydraulic modelling, detail designs and mitigating measures satisfy all relevant DCPs and Council's policies, and drafts thereof, NSW Floodplain Development Manual, Australian Rainfall and Runoff design guidelines, industry guidelines, development consent targets and best management practice prior to the issue of any Construction Certificate.

Stormwater Management Plan

- 46 A Stormwater Management Plan and Report is to be prepared by a suitably qualified and experienced Stormwater Engineer (with NPER registration or equivalent demonstrated experience) in accordance with Council's DCP Chapter 67 Engineering Requirements for Development, draft DCP Chapter 97 Water Sensitive Urban Design, NSW Floodplain Development Manual and Australian Rainfall and Runoff design guidelines. The plans shall demonstrate through modelling, that stormwater management principles have been satisfied prior to the issue of any Construction Certificate. Issues that require further attention are, but are not limited to;
- a Provision of at-source water quality treatment measures to be incorporated into the stormwater management ethos ie. filter baskets to ensure a constant effective treatment of stormwater from carpark and landscape areas, rather than only an end-of-pipe solution. All stormwater generated on the development, including roads and grassed areas, is to be treated for the removal of pollutants before discharging into Tuggerah Lake in accordance with draft DCP Chapter 97. All post development stormwater (without quality measures) is to be treated to:
 - i. 85% reduction in the post-development mean annual load of Total Suspended Solids (TSS).
 - ii. 65% reduction in the post development mean annual load of Total Phosphorus (TP).
 - iii. 45% reduction in the post development mean annual load of Total Nitrogen (TN).
 - iv. Retention of 100% of litter greater than 5mm for all flows up to the 1-year ARI peak flow.
 - v. No visible hydrocarbons/oils for flows up to the 3-month one-year ARI peak flow.
 - b Ensure all water runoff from car washing facilities or areas within the development is to be directed to the sewer.

- c Implement a maintenance schedule to ensure the above water quality removal targets are achieved and that adequate resources are provided to satisfy the type of measure provided and the amount and type of pollutant to be collected and disposed of.
- d Ensure and demonstrate that suitable water conservation measures are implemented, which should include but not be limited to:
 - i The provision of rainwater tank/s in the approved location including plumbing to collect rainwater from the roof area as detailed in the BASIX Certificate. The tank is to be installed in accordance with the requirements of the National Plumbing and Drainage Code AS/NZS 3500, shall include first flow diversion devices fixed to all inflows, be provided with a functioning pressure pump, and be plumbed to service all fixtures as detailed in the BASIX Certificate. The tank must be controlled such that supplemental flows from domestic mains do not take place until the tank is at least 80% empty.
 - ii All toilet cisterns, showerheads and taps on bathroom and kitchen hand basins must achieve compliance with the Water Efficiency and Labelling and Standards Scheme (WELS).
 - iii Rainwater tanks are to be installed to service landscaped areas, toilets, and car washing bays.
 - iv Water fittings and storages are required to achieve a 40% reduction in potable water consumption from the development.
 - v Undertake modelling to estimate and assess the treatment efficiency and water balancing capacity of the proposed measures and any future strategies.
 - vi Consumption from all rainwater tanks is to be metered and monitored. Recordings of rainwater tank consumption and supply from Wyong Shire Council reticulation network is to be monitored to ensure the above requirement is achieved and supplied to Council for auditing purposes.
 - vii All rainwater tank storages are to be located so that adequate free drainage outlets are achieved to Tuggerah Lake.
- e Demonstrate that a site hydrologic and hydraulic assessment has been prepared and should include but not be limited to:
 - i. Provision of on-site overland flowpaths that will allow the safe passage of pedestrians and vehicles. The hydraulic design criteria for all overland flowpaths will be for all storm events up to the 100-year ARI storm event and the PMF should be analysed for consideration of pedestrian safety, vehicle stability and property damage;
 - ii. The creation of drainage easements in favour of the benefiting property or Authority over constructed stormwater drainage systems. All costs associated with the creation these easements will be borne by the applicant.

- iii. The inclusion of 90% impervious factor applied for the catchment analysis.
 - iv. PMF flows shall be estimated using Book 2 (Design Rainfall Considerations) and Book 6 (Estimation of Large and Extreme Floods); Australian Rainfall and Runoff (ARR).
 - iii. An appropriate blockage factor of 50% is to be applied to all inlet structures;
 - iv. Appropriate freeboards are to be applied to all adjoining building structures from property overland footpaths;
 - v. Points of discharge from the site into Tuggerah Lake and proposed measures to treat and reduce pollutant loads and scouring of the Lake bed.
- f ensure that the impacts of Climate Change have been incorporated into the flood and stormwater management provisions of the development including:
- o Sea level rise, increased inundation, increased wave attack, groundwater and storm surges;
 - o Increased rainfall intensities;
 - o Stormwater systems including overland flow path/s freeboards to basement car parks.
 - o A strategy to provide long term protection of the development and the replacement/reinstatement of potential damaged areas
 - o Engineering plans detailing basement access ramp flood protection gates (self closing flood barrier, warning signage, emergency lighting and manufactures specifications.

Certification

- 47 Certification is required from appropriate qualified and experienced professionals that all the hydrologic and hydraulic modelling and subsequent opinions and recommendations for the groundwater, flooding and stormwater management issues relating to the development are consistent with the latest revised plans and documentation. Conditions and justifications used are to satisfy all relevant DCP's and Council policies and drafts thereof, NSW Floodplain Development Manual, Australian Rainfall and Runoff design guidelines, industry guidelines, development consent targets and best management practice prior to the issue of any Construction Certificate.

Residential Dwellings

- 48 Residential storage facilities are to be provided for each dwelling in accordance with the areas contained within the provisions of the Residential Flat Design Code.
- 49 In accordance with Council's DCP Chapter 64, Multiple Dwelling Residential Development, 10% of all units within each residential flat building are to be designed as suitable for adaptation for occupation by disabled/aged persons as outlined in AS 4299:Adaptable Housing.

Pedestrian Access

- 50 A public reserve 3 metres wide is required from the existing drainage reserve (along the southern boundary of the development) to connect to the proposed public pathway along the western boundary of the development. A plan showing details of the land to be dedicated to accommodate the public pathway is to be submitted for Council approval. Any changes requested by Council are to be incorporated into a revised plan. The plan requires approval by Council prior to proceeding to the Construction Certificate stage. The land is to be dedicated as part of Stage 1 of the development.
- 51 A Management Plan for maintaining 24 hour safe and direct public access (for both eastern and western side developments) through the site and from the public carparking areas within the development is to be submitted to Council for approval. Safe and direct pedestrian desire lines are to be identified and accommodated within the plan, incorporating the access points, and submitted to Council for approval prior to the issue of the Construction Certificate.

Utility Services

- 52 The location of water services and public utilities need to be shown on the submitted plans. Service locations will need to comply with the relevant authorities requirements, and documentation supporting this will need to be submitted to Council prior to approval.
- 53 Easement and service trench locations need to be formalised before an adequate design is approved by Council.

Waste services

- 54 The Waste Management Plan (WMP) prepared by Hyder Consulting (dated November 2004) is to be revised in accordance with Councils DCP 69: Waste Management, describing how the waste system is to work across the entire development. A revised WMP is to be submitted to Council prior to issue of a Construction Certificate.

Details are to include but not be limited to:

- Generation of wastes for each building/complex across the site
- Transfer details of wastes from their origin to intermediate storage areas such as garbage rooms and/or their later transfer to bulk storage areas. Detail the personnel/machinery that is required to transfer wastes, and detail the proposed routes of transfer.
- Location of bulk storage areas to be serviced by waste collection vehicles
- Requirements for service areas and safe passage of vehicles/machinery and pedestrians to accommodate the proposed waste management plan.
- Provision for recycling is required for the residential component of the development.

Waste Management

- 55 For safety, amenity and maintenance reasons, each of the waste storage areas must be constructed in accordance with the requirements of DCP Chapter 69 and the following standards:

- Floors must be constructed of concrete, graded and drained to an approved drainage outlet connected to the sewer and finished to a smooth even trowelled surface;
- Walls must be constructed with solid impervious material and shall be cement rendered internally to a smooth even steel trowelled surface;
- All intersections between the walls and floors shall be coved with coving having a minimum radius of 25mm;
- All entry points into the room must be bunded to prevent the escape of liquid waste. Bunding shall be for 110% of the likely liquid storage waste and constructed in such a manner that does not obstruct the removal of waste receptacles from the room or create a safety risk to users;
- Adequate ventilation shall be provided;
- Adequate lighting shall be provided;
- The ceiling must have a minimum height of 2.1m from floor level and be finished with a smooth faced non-absorbent material capable of being easily cleaned;
- Waste storage areas shall prevent the access of vermin;
- Waste receptacles used shall be compatible with Wyong Council's waste collection service;
- The door to the storage area shall be weatherproof and shall be openable from the inside at all times;
- Hot and cold water hose cocks shall be located inside or within close proximity to the waste storage areas to facilitate cleaning.

Plans are to be submitted to Council for approval demonstrating compliance prior to issue of the Construction Certificate for each relevant stage.

Resort Development on Eastern Side:

- 56 The passage of the El Lago garbage room is to be designed so as to permit the easy movement of bulk bins from this room to the primary garbage room.

Residential Development on Western Side:

- 57 The Central garbage room must be divided into a section for the storage of waste generated by the residential apartments and a section for the storage of waste generated by the commercial and retail outlets. Appropriate access must be provided to both sections for residents or commercial tenants as well as the collection contractor.

- 58 The access to the central garbage room on the western side of Oakland Avenue is to be redesigned to allow for a garbage to enter (and manoeuvre within) the lower ground floor at the base of the entry ramp. The plans shall demonstrate that the truck apron to service the central garbage room is of insufficient size including enough clearance for the operator to approach the rear of the truck. The width of the apron should be at least 3.5 m and a minimum length of 12.5 m.
- 59 Each garbage room should have at one access point with a width of at least 2.5 m to allow bulk bins to be freely moved in and out.
- 60 Proposed routes of waste collection vehicles are to be shown on the plans and designed to accommodate for their safe passage, including provisions for vertical clearances above and below. Provisions for height clearances and turning templates are to be shown on plans to show compliance.

Lighting

- 61 Street lighting details need to be provided to Council as to the proposed type and location of poles for the development. These are to be provided on all pedestrian links and are also to be in accordance with RTA guidelines for clear zones. Compliance shall be demonstrated on plans prior to issue of the Construction Certificate.
- 62 Lighting to AS1158 is to be provided throughout the development including within carparking areas, pedestrian routes and other common open spaces. Design plans shall be prepared by an appropriately experienced consultant and submitted to Council for assessment and approval prior to the issue of the Construction Certificate.

Retaining walls

- 63 All proposed retaining walls are to be designed by a practising Civil/Structural Engineer in accordance with AS4678, AS3600, AS1720, AS/NZS1170 and other relevant codes and standards. Additionally, the retaining walls must be designed for possible surcharge loading from structural improvements to the neighbouring property. Details demonstrating compliance are to be provided prior to the issue of a Construction Certificate for the relevant related stage.

FORESHORE RESERVE

Shared Footway/Cycleway

- 64 The provision at no cost to Council of concrete paving along the foreshore area adjacent to the development. A 3 metre wide shared path is required along the foreshore from Tuggerah Parade to Wilfred Barrett Drive. The concrete paving is to be adequate to support access for emergency and maintenance vehicles and in accordance with DCP 2005, Chapter 67 - Engineering Requirements for Development. The design plans must be approved by the Council prior to issue a Construction Certificate.

Boatshed and Wharf Access

- 65 Provision is to be identified on the plans for service and emergency vehicles to access the existing Wharf and Boat Shed facilities.

Foreshore Promenade Works and Public Art

- 66 All works nominated within the public art masterplan for the foreshore promenade and final design concept for the public art works are to be detailed and approved by Wyong Council prior to issue of a Construction Certificate.

Foreshore seawall reconstruction

- 67 The existing sea wall along the foreshore shall be reconstructed to provide an active land/water public promenade interface in accordance with the objectives of the adopted The Entrance Peninsula Planning Strategy. Any structure should facilitate easier pedestrian access to the waters edge and provide a safer level of service to the community. The design plans shall the proposed means of achieving the above objective and include a bollard treatment along the top of wall and the placement of the appropriate warning signage. Design details prepared by a suitably qualified and practising structural engineer shall be approved by the Council prior to issue a Construction Certificate.

STORMWATER

Stormwater Harvesting & Re-Use

- 68 The sewer surcharge gully is to be relocated clear of the proposed building to facilitate access.

Carwash Bay

One parking space is to be designed and constructed as a car wash bay for each permanent residential building. Each wash bay shall be bunded, graded and drained to discharge to trade waste. Each bay shall have a harvested water supply connection and a power outlet.

Stormwater Infrastructure

- 70 Stormwater drainage works discharging from the site into a public system or public land require approval from Council under Section 68 of the Local Government Act. The extent of work must be determined by the Consent Authority prior to issue of a Construction Certificate. All works are to be designed and constructed in accordance with Council's Development Control Plan 2005, Chapter 67 - Engineering Requirements for Development. Design plans must be approved by Council prior to issue of a Construction Certificate.

Carparking

- 71 The final carpark layout plans shall demonstrate compliance with AS/NZS 2890.1/2004: Parking Facilities, Part 1: Off Street Parking, AS2890.2: Parking Facilities, Part 2: Off-street Commercial Vehicle Facilities, and Councils DCP 61: Carparking.

Details are to include but not be limited to:

- Circulation arrangements for ramps and roadways to increase safety, minimise conflicts and make routes between spaces and exit/entrances more direct

- Truckway entrance to accommodate service vehicles and B85 vehicles entering/exiting the lower ground carpark
- All intersection areas to be designed with allowance for a B85 vehicle passing a B99 vehicle
- Minimum widths of circulating roadways and ramp exit/entrances
- Extensions to end parking widths on blind aisles
- Manoeuvrability into/out of parking spaces¹⁰
- Minimum widths of access driveways and design to cater for service vehicles
- Line marking, signage and speed control devices.

Deed of Agreement

- 72 Prior to the release of the first Construction Certificate, the applicant is to execute a Deed of Agreement with Council as land owner in accordance with Council's resolution dated 8 December 2004.

Prior to Commencement and During Works:

The following conditions must be satisfied prior to the commencement and during site works, including any works relating to demolition, excavation or vegetation removal.

Approved Plans

- 73 A copy of the stamped approved plans must be kept on site for the duration of site works and be made available upon request to either the Principal Certifying Authority or an officer of the Council.

Acid Sulphate Soils

- 74 On completion of excavation works, submit documentary evidence to the Principal Certifying Authority to demonstrate compliance with the requirements of the Acid Sulphate Soils Management Plan.

Construction Work - Hours

- 75 Construction work may only be undertaken in accordance with the provisions of the Environmental Protection Authority's 'Environmental Noise Control Manual-Guidelines for Construction Noise' as identified below:

Monday to Saturday 7.00 am to 5.00 pm.

Work is not to be carried out on Sundays or Public Holidays.

Consolidation – Two Lots

- 76 Prior to commencement of any works on the site, the consolidation of all lots comprising the eastern and western parts of the site into two parcels east and west.

Construction

- 77 Any excavation below the level of footings of buildings on adjoining allotments requires the preservation and protection of the buildings from damage, and if necessary, underpinning and support of the building in a manner certified by a Practising Structural Engineer. The owner of the adjoining property must be given written notice of the intention to excavate and provided with details of the proposed work at least seven (7) days prior to excavation. **Note: On-the-spot fines may be imposed by Council for non-compliance with this condition.**

Building Site Hoarding

- 78 A suitable hoarding or fence complying with WorkCover NSW requirements is to be erected between the building or site of the proposed building and any public place to restrict public access to the site (including demolition and/or excavation site) and building works, materials or equivalent and to prevent any materials from or in connection with the work, falling onto the public place. The hoarding is to be erected and managed in accordance with Wyong DCP Chapter 111 – Hoardings. If it is intended or proposed to erect the hoarding or fence on the road reserve or public place a separate application made under the Roads Act 1993 will need to be lodged with Council together with the associated fee.

Demolition

- 79 Building demolition work is to be carried out in accordance with the requirements/provisions of the AS2601-2001 - The Demolition of Structures.
- 80 Prior to the demolition and/or removal of existing structures on site, all existing services are to be disconnected, sealed and made safe. The sewer and water service is to be disconnected by a licensed plumber and drainer. A Start Work Docket must be submitted to Council and Council's Plumbing and Drainage Inspector must certify that the works have been undertaken to the satisfaction of Council.
- 81 The disposal of any asbestos materials must be in accordance with the requirements of WorkCover NSW and AS2601-2001 - The Demolition of Structures.

Dilapidation – Roads and Other Assets

- 82 A dilapidation report must be submitted to Council as the Roads Authority prior to the commencement of any works. The report must document and provide photographs that clearly depict any existing damage to the road, kerb, gutter, footpath, driveways, water supply, sewer works, street trees, street signs or any other Council assets in the vicinity of the development.

Dust Control

- 83 Appropriate measures shall be employed by the applicant/owner during demolition, excavation and construction works to minimise the emission of dust and other impurities into the surrounding environment to the satisfaction of the Consent Authority.
- 84 In the event of mud, crushed rock or other debris being carried onto public roads or footpaths from the subject land, appropriate measures must be implemented to eliminate the problem to the satisfaction of the Consent Authority.

Erosion and Sediment Control

- 85 The provision of soil erosion and silt controls on the site in accordance with Council's Development Control Plan 2005, Chapter 67 – Engineering Requirements for Development and/or Construction - Managing Urban Stormwater (Blue book) and the approved development plans prior to any works commencing on the site. **Note: On-the-spot fines may be imposed by Council for non-compliance with this condition.**
- 86 Sand and other materials that could potentially be washed off the site during rain periods are to be stored behind the silt control barrier. **Note: On-the-spot fines may be imposed by Council for non-compliance with this condition.**
- 87 The display of an appropriate sign to promote the awareness of the importance of the maintenance of sediment control techniques on the most prominent sediment fence or erosion control device, for the duration of the project. **Note: On-the-spot fines may be imposed by Council for non-compliance with this condition.**
- 88 The provision of a single all weather access way incorporating a vehicle shake down device within the property, extending from the kerb and gutter to the building under construction, so as to provide appropriate access to the site which will reduce the potential for erosion to occur and for materials to be tracked onto the road by vehicles. A diversion drain is to be installed to divert runoff from the accessway into a silt fence. These works are to be in accordance with the requirements of Council's Policy E1 - Erosion and Sediment Control from Building Sites. **Note: On-the-spot fines may be imposed by Council for non-compliance with this condition**
- 89 The provision of a metal groyne/s or kerb inlet trap/s to the downstream drainage pit/s of the street drainage system to prevent any silt that may have left the site from entering the drainage system. The build up of silt and debris must be removed from the site on a daily basis. **Note: On-the-spot fines may be imposed by Council for non-compliance with this condition**

Tree Protection Measures

- 90 All services, including water and electricity, must be located, designed and installed to prevent root damage to retained trees. Methods for the installation of services within the vicinity of trees are contained within Development Control Plan 2005 Chapter 67 - *Engineering Requirements for Development* and include under boring and excavation by hand. Works such as these must be carried out under the supervision of a suitably qualified and experienced Arborist.
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- 91 All trees to be retained on the site and all existing trees to be retained within the Entrance Road foreshore area are to be protected by fencing or other accepted protection methods in accordance with the approved Tree Management Plan (TMP). Such protection measures must be installed prior to commencement of any works and maintained in good order for the duration of the works.
- 92 All existing trees located within Councils foreshore area (ie along The Entrance Road Foreshore to the north of the site) are to be retained and protected throughout the construction period. Tree protection measures are to be installed prior to commencement of any works, and an AQF5 arborist is to supervise all works within

the vicinity of any of these trees and submit periodic ongoing certification regarding the health and stability of the trees throughout the construction stages of the development.

Other Authorities

- 93 Other public authorities may have separate requirements and should be consulted prior to commencement of works in the following respects:
- Australia Post for the positioning and dimensions of mail boxes in new commercial and residential developments;
 - AGL Sydney Limited for any change or alteration to gas line infrastructure;
 - Energy Australia for any change or alteration to electricity infrastructure or encroachment within transmission line easements;
 - Telstra, Optus or other telecommunication carriers for access to their telecommunications infrastructure.

Site Requirements

- 94 The provision of a temporary closet on site from the time of commencement of building work to ensure that adequate sanitary provisions are provided and maintained on the building site for use by persons engaged in the building activity. The temporary closet is to be a water closet connected to the sewerage system or approved septic tank or a chemical closet supplied by a licensed contractor.
- 95 The provision of a metal waste skip (with self-closing lid or secure covering) or lined mesh steel cage(s) in accordance with the requirements of DCP 2005, Chapter 100 – Quality Housing, on site for the duration of the construction to ensure that all wastes are contained on the site. The receptacle is to be emptied periodically to reduce the potential for rubbish to leave the site. **Note: On the spot fines may be imposed by Council for pollution incidents.**
- 96 In accordance with the requirements of Council's Development Control Plan 2005, Chapter 69 - Controls for Site Waste Management, an on site storage area for reuse, recycling and disposal of materials is to be provided during construction. Concrete, brick, tile and excavation material is to be given first priority for reuse and recycling.
- 97 All building materials, plant and equipment must be placed on the site of the development so as to ensure that pedestrian and vehicular access in public places is not restricted and to prevent damage to the road reserve. The storage of building materials on Council's recreation reserves and/or road reserves is prohibited. **Note: On the spot fines may be imposed by Council for non-compliance with this condition.**
- 98 No works, vehicles or materials are permitted within the footpath, reserve or adjacent allotment areas highlighted on the approved site plan.

- 99 The Principal Contractor (or Owner/Builder) is to erect a sign in a prominent position on the site (not attached to any tree) identifying the name, address and telephone number of the Principal Certifying Authority (PCA) for the work; the name, address and telephone number (including a number for outside of business hours) of the Principal Contractor for the work (or Owner/Builder); and stating that unauthorised entry to the site is prohibited. The sign must be maintained while the work is being carried out and is to be removed when the work is completed. Appropriate signs can be collected from Council's Customer Service Centre, where Council is the nominated PCA.

Retaining Walls

- 100 A Construction Management Plan must be prepared for the construction of the proposed retaining walls prior to the commencement of works. The plan shall detail the construction methodology to ensure workers safety, public safety and the structural stability of the neighbouring properties. An authority to enter the adjoining property must be obtained prior to commencement of works if the construction methodology or temporary protection works encroach into the neighbouring property. Before excavation, the principal contractor must notify their intention to the adjoining owners and shall at the same time furnish to such owners particulars of the work proposed to be carried out.
- 101 Upon completion of the retaining structures a report shall be submitted to the Council/Principal Certifying Authority from a suitably qualified and practising Civil/Structural Engineer. The report shall certify that all retaining walls have been constructed wholly within the property and in accordance with Construction Certificate, accepted practice, and that the structure is stable and sufficient to support all anticipated loads.

Survey Reports

- 102 To ensure that siting, height and view sharing objectives are achieved, a survey of each floor level must be undertaken by a registered surveyor and submitted to the Principal Certifying Authority prior to the wall frames being erected. The survey is to detail that the boundary setbacks and finished floor levels are in accordance with the approved plans. In the case of roof structures the level of the roof ridge must be confirmed prior to the fixing of the roof cladding.

Swimming Pools

- 103 Prior to each pool being filled with water, the swimming pool safety barriers and gates are to be installed in accordance with the approved plans and specifications and the Swimming Pools Act 1992, Swimming Pools Regulations 2008 and AS1926.1-2007 including the display of an approved sign regarding pool safety and resuscitation techniques that contains all of the following:
- "YOUNG CHILDREN SHOULD BE SUPERVISED WHEN USING THIS SWIMMING POOL";
 - "POOL GATES MUST BE KEPT CLOSED AT ALL TIMES";
 - "KEEP ARTICLES, OBJECTS AND STRUCTURES AT LEAST 900mm CLEAR OF THE POOL FENCE AT ALL TIMES"; and

- A simple flow sequence (which may be the flow sequence depicted in the Cardiopulmonary Resuscitation Guideline) containing details of resuscitation techniques (for infants, children and adults).

Water and Sewer Services/Infrastructure

- 104 All water and sewer infrastructure is to be located and then protected for the duration of construction, to ensure that access is available at all times. The approval of Council is required to any relocation, modifications or decommissioning of existing infrastructure.
- 105 The submission of notification for the intention to commence works including the submission of all necessary pre-construction documentation to the Principal Certifying Authority.
- 106 All water and sewer works or works impacting on water and sewer assets are to be designed and constructed to the requirements of Wyong Shire Council as the Water Supply Authority under the Water Management Act 2000. The requirements of Section 306 of the Water Management Act, 2000 which apply to this development, are detailed in the Section 306 requirements letter issued for each stage of the development by Wyong Shire Council. All works required in the Section 306 letter must be shown on the design plans. The design plans must be submitted to and approved by Council prior to commencement of work.

Acid Sulphate soils

- 107 A contingency plan is to be developed outlining the remedial actions to be taken if any indicator characteristics of acid sulphate soils are uncovered during excavation works associated with this development. This should be developed by a suitably qualified person.
- 108 A suitably qualified geotechnical/environmental engineer should be present during the initial stages of bulk excavation with natural soils to further assess the presence of indicator characteristics of acid sulphate soil and to implement the contingency plan if uncovered.

• Site Management

- 109 A Site Management Plan is to be prepared for each relevant stage of the development in consultation with at least an Acoustic Engineer, Hydraulic Engineer, Builder and other suitably qualified personal, submitted to Council prior to commencement of any work on the site for that stage. The Site Management Plan is to address the following matters :-
- Hours of construction activities and a detailed management approach showing how construction activities will be phased to minimise impact on the community;
 - Truck routes to and from the site;
 - Erection of hoardings;
 - Methods of dust suppression;
 - Methods for containing sediment within the site;

- Cleaning of trucks and other vehicles prior to leaving the site;
- Monitoring the condition of roads in the vicinity of the site during remediation, excavation, demolition and construction stages of the development process;
- Noise control and abatement measures;
- Protection of any trees to be retained on the site and adjoining site including the road reserve for the duration of the construction process;
- Processes proposed to ensure the community is advised of the construction programme including, any activities such as demolition which may give rise to particular noise and disturbance and /or dust nuisance;
- Name and contact details of the site manager or other responsible person who may be contacted on a 24 hour/7 day week basis;
- Complaint management system; and
- Location of storage of waste and recycling bins, reused materials, building materials and any stockpiles with all materials being located within the boundaries of the site.
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- The Site Management Plan is to ensure that access is maintained to surrounding residential, open space and commercial uses throughout the construction programme.

Silencing Devices

110 Sound attenuating devices shall be provided and maintained in respect of all power-operated plant used during demolition, earth works and the erection of the structure. The quietest available plant should be used and be regularly maintained and fitted with appropriate mufflers.

- **Foreshore works**

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- 111 Separate approval is required from Council prior to commencement of works on Council land within the foreshore area.

Street Lighting

112 Lighting standards shall be approved by Council & Energy Australia prior to the commencement of works. The position of each light shall be in accordance with AS 1158 and Safer by Design principles.

Prior to Release of Occupation Certificate:

The following conditions must be satisfied prior to the release of an Occupation / Subdivision Certificate.

Amenity

113 Any equipment required for refrigeration, air-conditioning, heating and the like must be located on the subject land and/or must be suitably insulated for the purpose of reducing noise emissions and should not project beyond the roofline or from an external wall.

BASIX

- 114 Pursuant to Clause 97A(3) of the Environmental Planning and Assessment Regulation 2000, it is a condition of this Development Consent that all the commitments listed in the BASIX Certificate for the development are fulfilled. All work is to be satisfactorily completed prior to the issue of the Occupation Certificate.

Building Code of Australia

- 115 Compliance with the relevant provisions and requirements of the Building Code of Australia.

Certificates/Engineering Details

- 116 Prior to the occupation of the building, an application for an Occupation Certificate for the development must be submitted to and approved by the Principal Certifying Authority.
- 117 The submission to Council of documentation to demonstrate full compliance with all consent conditions in accordance with Section 157 Clause 2 (f) of the Environmental Planning and Assessment Regulations 2000 prior to issue of the Subdivision Certificate/Occupation Certificate.

Consolidation/Transfer – Single Parcel

- 118 The consolidation of all lots comprising the site into one lot by registered subdivision prior to the issue of an Occupation Certificate. Adequate proof of the consolidation is to be submitted to the Principal Certifying Authority.

Dilapidation

- 119 Any damage not shown in the Dilapidation Report submitted to Council before site works had commenced, will be assumed to have been caused as a result of the site works undertaken and must be rectified at the applicant's expense, prior to release of the Occupation/Subdivision Certificate.

Disabled Access

- 120 Access to and throughout the buildings shall comply with the Building Code of Australia, AS1428.1-2001 and the objectives of the *Disability Discrimination Act 1992* (Commonwealth).

Food Act Requirements

- 121 No food handling, (as defined by the NSW Food Act 2003), is permitted in the food premises prior to the issue of the Occupation Certificate.
- 122 All liquid trade waste is required to pass through a basket arrestor with fixed screens, fitted to all floor wastes and sinks, before being discharged into the sewerage system.
- 123 Compliance with the requirements of the New South Wales Food Act 2003, the Food Regulation 2004, and AS4674–2004 – Design, Construction and Fitout of Food

Premises, and AS1668, Part 11 – Mechanical Ventilation, for all food preparation and food storage areas, including liquor areas.

- 124 The installation of hand wash facilities with a minimum dimension of 500mm x 400mm providing warm running water through a common mixing spout with hands-free tap operation (consisting of elbow or wrist operated tap levers, foot or hip operated tap levers, or electronic sensor tap operation).

Waste

- 125 All goods and/or waste receptacles shall be screened from public view to the satisfaction of the Consent Authority.

Landscaping

- 126 The provision and maintenance of landscaping in accordance with Council's Policy Number L1 - Landscape for a Category 3 development in accordance with the relevant plans. All landscaping works are to be completed prior to the issue of an Occupation Certificate and a landscape implementation report from the approved landscape consultant is to be submitted to the Principal Certifying Authority.
- 127 All disturbed surfaces on land resulting from the buildings and works authorised or required by this consent shall be revegetated and stabilised to the satisfaction of the responsible authority so as to prevent any erosion or siltation either on or adjacent to the land.
- 128 All landscaping works are to be completed prior to the issue of an Occupation Certificate and a landscape implementation report from the approved landscape consultant is to be submitted to the Principal Certifying Authority.

Replacement planting

- 129 Prior to issue of an occupation certificate, the applicant is to plant a minimum of five replacement Norfolk Island Pines (*Araucaria heterophylla*) within Council's foreshore reserve in front of the site. The replacement trees are to have a minimum pot size of 200 litre and to adhere to NATSPEC regulations. These replacement trees are to be adequately fenced off in order to minimise the potential for vandalism

Stormwater

- 130 The prevention of any obstruction of surface or sub surface drainage that could result in the disruption of the amenity, drainage or deterioration to any other property. Works are to be satisfactorily completed prior to issue of the Occupation/Subdivision Certificate.

Swimming Pools

- 131 The disposal of filter backwash to the sewer must be completed in a manner that will not cause a nuisance.

Civil Works Completion

- 132 All road, drainage, foreshore and servicing works are to be completed prior to issue of an Occupation Certificate for each stage

Road Dedication

- 133 All roads are to be constructed and dedicated up to the boundaries of all adjoining properties prior to the issue of a Subdivision Certificate for consolidation. Details shall be incorporated in the final plan of subdivision.

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Separate approval

- 134 Separate development consent is required for the use of the individual tenancies prior to any use commencing detailing the proposed use/activity. Should the proposed uses have the potential to generate offensive noise within the meaning of the Environment Operations Act 1997, the application shall include an acoustic report from a qualified acoustic consultant.

Public Art

- 135 The Public art work/s is to be constructed and installed on the subject site to the satisfaction of Council in accordance with Council's draft DCP 2005 Chapter 112 - Public Art and the approved "public art masterplan" and "final design concept" prior to issue of an Occupation Certificate. Desirably the public art feature would stimulate interest and provide enjoyment to visitors along the foreshore.
- 136 Pursuant to Clause 2.1.4(e) of draft DCP 2005 Chapter 112 - Public Art, a certificate of completion is to be signed by the artist and submitted to Council prior to the release of the Occupation Certificate.

Foreshore Promenade Works and Public Art

- 137 All works nominated within the masterplan for the foreshore promenade are to be completed in accordance with the approved masterplan and to Council's requirements prior to the issue of an Occupation Certificate.

Noise

- 138 Upon completion of the development and prior to the issue of an Occupation Certificate, the submission to Council of a report from a qualified Acoustic Consultant to confirm that all acoustic requirements outlined in the acoustic report have been complied with. An Occupation Certificate shall not be issued until all the acoustic requirements have been satisfactorily completed.

Stormwater

- 139 The downpipes and stormwater drainage system being installed and connected to the approved stormwater disposal system immediately after the roof materials are positioned to prevent erosion of the site from roof water.

Traffic and Transport Signage

140 “No Stopping” signs are to be placed:

- along the eastern side of the proposed Public Road for its entire length.
- within the cul-de-sac head in The Entrance Road near Tuggerah Parade.
- within the cul-de-sac head in Clifford Street.

141 Signage is to be installed indicating:

- A minimum of 10 short term (5 Minute) and disabled parking spaces are to be provided in the vicinity of the intersection of the proposed Public Road and The Entrance Road.
- A minimum of 8 short term (5 Minute) and disabled parking spaces are to be provided in the vicinity of the proposed western cul-de-sac of The Entrance Road (near Lakeside Parade).
- Parking for 3 Taxi spaces in Bent Street

142 Upgrading of the Coral Street/Oakland Avenue Intersection to Council’s and RTA’s requirements is to be carried out. Detail designs are to be submitted to the RTA & Council for approval under the Roads Act prior to issue of the Construction Certificate. The Developer is eligible to receive a credit for these works as identified in the Section 94 Plan and offset this against the Roadworks contribution.

143 The east side ground floor loading dock to be sign posted for SRV only.

144 “Public Parking” signs are required to direct and identify the location of public parking.

Certification

145 Certification is required from appropriate qualified and experienced professionals that all the constructed works have been completed as per the work-as-executed survey and all associated groundwater, flooding and stormwater management issues relating to the development are consistent with the approved Construction Certificate plans and that all constructed works have been completed in accordance with all relevant DCPs and Council’s policies, and drafts thereof, Australian Standards, *NSW Floodplain Development Manual*, *Australian Rainfall and Runoff design guidelines*, industry guidelines, development consent targets and best management practice prior to the issue of any Occupation Certificate.

Works As Executed

- 146 The provision of Works as Executed information for each relevant stage of the development as identified in Council's Development Control Plan Chapter 67 - Engineering Requirements for Development prior to issue of the Occupation Certificate for the various components of the development such as basement carparking areas, the buildings, foreshore works, the road works and stormwater drainage works, infrastructure including all service utility relocations and works. The information is to be submitted in hard copy and in electronic format in accordance with Council's "CADCHECK" requirements. This information is to be approved by Council prior to issue of the Subdivision Certificate for consolidation of the site.

Water and Sewer Services/Infrastructure

- 147 All water and sewer works for the development must be approved by Council prior to the issue of an Occupation Certificate.
- 148 The obtaining of a Section 307 Certificate of Compliance under the Water Management Act 2000 for water and sewer requirements for each stage of the development from Wyong Shire Council as the Water Supply Authority prior to issue of the Occupation Certificate. All works for the development must be approved by Council prior to the issue of a Certificate of Compliance.

Easements**Restrictions on Use**

- 149 The registration of the necessary restrictions as to user.
- 150 The plan of subdivision and Section 88B instrument shall establish the following restrictive covenants; with the Council having the benefit of these covenants and having sole authority to release vary or modify these covenants. Wherever possible the extent of the land affected by these covenants shall be defined by bearings and distances shown on the plan of subdivision.
- All necessary right(s) of way including unrestricted public access to and within public carparks and Council's foreshore area and easement(s) for services are to be approved by Council prior to issue of the Subdivision Certificate and registered with the plan of subdivision.
 - For any lots that have overland stormwater drainage flow paths affecting the lots approved as constructed levels are not to be altered and no structures are to be erected within the area of restriction.
 - Where any structure (incl basement car park walls) or batters provide support to any adjoining lands or roads the supporting structure is to be covered by an easement and restriction. The easement is to be over the full supporting elements and other supporting lands or elements assisting in support. The restriction is to specify only Wyong Shire Council have the power to vary or modify the easement or restriction. In addition, a positive covenant is to be included requiring that structural assessments are carried out at suitable intervals and reports submitted to Council identifying any rectification works to be carried out by the supporting structure owner.

Ongoing Operation:

The following conditions must be satisfied during use / occupation of the development.

Advertising Signs

- 151 No advertisement shall be erected on or in conjunction with the use and/or development without prior development consent unless the advertisement is an 'approved sign' under Development Control Plan 2005, Chapter 50 - Advertising Signs.

Amenity

- 152 The use and development permitted by this consent must not, in the opinion of the Consent Authority, adversely affect the amenity of the locality by reason of the processes carried on; the transportation of materials, goods or commodities to or from the subject land; the appearance of any buildings, works or materials; the emission of noise, artificial light, vibration, smell, fumes, smoke, vapour, steam, soot, ash, dust, waste water, waste products, grit, or oil; the presence of vermin, or otherwise other than to the extent approved by the consent.
- 153 All lighting used to externally illuminate buildings, works and uses shall be fitted with cut-off luminaries (baffles), so as to prevent the emission of direct and indirect light onto adjoining roadways, land and premises.
- 154 No sound amplification equipment, juke boxes or loudspeakers shall be used for the purpose of announcements, broadcasts, playing of music (whether recorded or otherwise) or similar purposes (so as to be audible on adjoining public or private land) save with the written permission of the Responsible Authority. Noise emissions must comply with EPA and the relevant State/Regional/Local Environment Planning Policy requirements.
- 155 Any security alarm installed on the premises must be fitted with a 'cut-off' device limiting any sounding of the alarm to maximum duration of ten (10) minutes, with no repeat sounding until manually reset; and or 'silently wired' to a security firm.

Swimming Pools

- 156 All swimming pool plant being sited in accordance with the approved plans, or where necessary, it is to be sound insulated so as to minimise the noise to adjoining properties. Under the provisions of the Protection of the Environment Operations Regulations 2000, (Noise Control), a person must not cause or permit a swimming pool or spa pump to be used on residential premises if noise is audible within a habitable room of any other residential premises;
- before 8.00am or after 8.00pm on any Sunday or public holiday, and
 - before 7.00am or after 8.00pm on any other day.

Waste Management

- 157 No receptacles for any form of rubbish or refuse (other than public waste bins) may be placed or allowed to remain in view from a public road or thoroughfare and odour must not be emitted from any such receptacle(s) so as to cause offence to any person(s) outside the subject land.
- 158 All waste produced from the proposed businesses must be contained within the building and disposed of via the waste facilities provided. All rubbish and refuse is to be stored out of public sight except during collection.

ENVIRONMENTAL**Demolition and excavation stages**

- 159 The recommendations of the Phase 1 Environmental Site Assessment produced by Hyder Consulting must be followed for the demolition and excavation stages for this development.

Noise

- 160 At no time should noise emitted from the proposed development, after occupation, exceed the background noise level by 5dB(A).

Amenity – hours

- 161 As this proposal borders a residential area the amenity of neighbouring occupants and residents will be preserved by restricting deliveries and waste removal to between:

7:00am and 8:00pm Monday to Friday
8:00am and 8:00pm Saturdays and Sunday

Noise – plant maintenance

- 162 Regular servicing and maintenance of 'plant' to ensure that it is run in a proper and efficient manner.
- 163 A log of all servicing and maintenance records for plant is to be kept and maintained by a nominated representative.

Noise - review

- 164 After six (6) months of occupation at the site it must be demonstrated that the noise levels comply with the Department of Environment and Climate Change's Noise Guide for Local Government.

Access for the Disabled - Disability Discrimination Act

- 165 The building/development must comply with the requirements of the Disability Discrimination Act (DDA). It should be noted that this approval does not guarantee compliance with the DDA and the applicant/owner should investigate their liability under this Act.

Water management

166 At no point should water, including groundwater that has different physical, chemical and/or biological properties to Tuggerah Lakes be allowed to enter the stormwater system from this site.

Note: An application may need to be sought from the Department of Environment, Climate Change and Water for an Environmental Protection License.

167 All waste generated by the development is to be collected, handled and transported by a licensed contractor to a facility that is licensed to receive this material.

Swimming pools

168 Operation and use of swimming pool facilities are to comply with the Swimming Pools Act 1992 and the NSW Public Health Public Swimming Pool and Spa Pool Guidelines.

Safer by Design

169 To minimise the opportunity for crime and in accordance with CPTED principles, the development shall incorporate the recommendations contained within the Crime Risk Report prepared by Tricorp Security dated 19.11.04, and the Crime Risk Evaluation prepared by Tuggerah Lakes Police Command dated 27.07.05 and the following measures:

- i. In order to maintain a safe level of visibility for pedestrians within the development, adequate lighting to AS1158 is to be provided to all common areas including the basement car park, common open space and any common stair access to these areas and pedestrian routes, particularly including the waste storage areas.

This lighting shall ensure consistency to avoid contrasts between areas of shadow/illumination and preferably be solar powered and with an automatic/timed switching mechanism, motion sensor or equivalent for energy efficiency. Such lighting shall be installed and directed in such a manner so as to ensure that no nuisance is created for surrounding properties or to drivers on surrounding streets. Car parking lighting system is to be controlled by sensors to save energy during periods of no occupant usage.
- ii. The roof of the basement parking area shall be painted a gloss white (or equivalent) in order to ensure good visibility, surveillance and less reliance on artificial lighting lux levels.
- iii. The design, installation and maintenance of landscaping (and associated works) within pedestrian routes around the site (and adjacent to mailboxes) shall not impede visibility and clear sight lines along the pedestrian footway from one end to the other.
- iv. The means to isolate the residential and commercial components of the building shall be incorporated into the development, including the security keying of lifts and doors and other measures for access control.
- v. Walls/screens between balconies shall be designed to avoid foot holes or natural ladders so as to prevent access between balconies/terraces within the development.

- vi. Adequate signage is to be provided and maintained to a legible standard within the development to identify pedestrian and vehicular facilities, entry/exit points and direct movement within the development. Clear concise signage using simple text in an international language to specify location of telephones/public transport/toilets/rest areas, expected behaviour (eg. alcohol free zones), emergency help location, alternative walking/cycling routes etc
- viii. The development shall be designed and constructed to minimise the opportunities for concealment or entrapment spaces with the means to isolate components of the development after hours from direct public access
- ix. The development management shall adopt an ongoing policy of rapid repair of vandalism and graffiti and ensuring that all lighting and external fixtures are in working order. The use of durable and easily maintained external materials and finishes. The installation of sturdy, non corrosive catches, bolt and locks on doors/windows.
- x. In accordance with the recommendations of the Crime Risk Evaluation dated July 2005 the CCTV system shall be extended to include coverage of the foreshore and all the car parks at the development site.

Servicing/Deliveries

- 170 The use of coach vehicles in Bent Street for the collection and delivery of patrons shall be restricted to the hours between 7.00am and 9.00pm daily.
- 171 Garbage trucks and similar service vehicles, other than small rigid vehicles shall only service the development between the hours of 7.00am and 7.00pm Monday to Saturday.

Vehicle Access and Parking

- 172 Provision shall be made for the turning of vehicles within the site to enable all vehicles to travel in a forward direction when entering and leaving the site.
- 173 No vehicles are permitted to reverse into or from the development. Particular reference to the loading dock area off Bent Street.

Pedestrian Access

- 174 A pedestrian access is to be maintained 24 hours per day, 365 days of the year, from Oakland Avenue through the development ("Arcade") to The Entrance Road.
- 175 The public parking on both eastern and western sides of the site must be freely available to the public 24 hours a day, 365 days of the year. The owner is to maintain the line marking and signage within the public car park to a safe operational standard.

Other Authorities

- 176 Compliance with the general terms of approval of the Department of Infrastructure Planning and Natural Resources dated 6 January 2005, copy attached.

- 177 Compliance with the general terms of approval of the Roads and Traffic Authority dated 23 September 2005 as below:

Road Noise

- 178 The proposed development should be designed such that the road traffic noise from Classified roads is mitigated by durable materials, in accordance with EPA criteria for new residential developments (The Environmental Criteria for Road Traffic Noise, May 1999). The RTA's Environmental Noise Management Manual provides practical advice in selecting noise mitigation treatments. Where the EPA external noise criteria would not feasibly or reasonably be met the RTA recommends that Council apply the following internal noise objectives for all habitable rooms under ventilated conditions complying with the requirements of the Building Code of Australia:
- All habitable rooms other than sleeping rooms: 45 dB(A) Leg (9Hr)
 - Sleeping Rooms 35 dB(A) Leg (9 Hr)

Access for Emergency Vehicles

- 179 Access for emergency and maintenance vehicles is to be provided to the length of the lake foreshore and service delivery vehicles to the boat shed and wharf.

- **Department of Primary Industries**

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- 180 Compliance with the requirements of Department of Primary Industries dated 8th August 2008 as below:

- - Any new stormwater discharge points or modifications to existing discharge points should be designed to reduce impacts on any sea grass beds in the vicinity of the proposed discharged points. These impacts include; scouring, sedimentation and fresh water inundation of the sea grass, all of which will kill the sea grass.
 -
 - Measures shall be adopted to minimise potential impacts on the estuary of acid water during the construction phase. In this regard, the ASS Management Plan shall stipulate zero discharge of water below pH7 from the site during construction.
 -
 - Should the development include works involving dredging, reclamation, marine vegetation or the obstruction of fish passage approval/permits would be required from the NSW DPI to authorise such activities.

-

Landscaping

- 181 All landscaping is to be maintained to maturity through the use of mulch and watering and allowed to achieve their natural height to the satisfaction of the Council. Where any approved landscaping dies or is substantially damaged within 5 years of planting, it must be replaced and maintained to maturity.

Use of the Proposed Convention Centre as a Place of Public Entertainment

- 182 The maximum number of occupants permitted within the proposed convention centre to be used for the provision of public entertainment are as follows: -

- *Convention Room 1*
Standing – 360 persons (by virtue of provided aggregate exit width)
Seated within removable seating – 225 persons
 - *Convention Room 2*
Standing – 450 persons
Seated within removable seating – 225 persons
 - *Convention Room 3*
Standing – 450 persons
Seated within removable seating – 225 persons
 - *Convention Centre as a whole*
Standing – 1350 persons
Seated within removable seating – 675 persons
- 183 Suitable counting methods are to be employed by Convention Centre management in order that permissible occupant numbers within the proposed convention centre are not exceeded.
- 184 In accordance with the requirements of Clause 98C of the Environmental Planning and Assessment Regulation, 2000, a suitable notice is to be displayed within a prominent position within the proposed convention centre, for view by patrons and authorities, specifying the following information: -
- (i) the maximum number of persons, as specified in the development consent, that are permitted in any part of the building used as a place of public entertainment,
 - (ii) the name, address and telephone number of the council of the area in which the building is located,
 - (iii) the name and business telephone number of an owner or manager of the part of the building used as a place of public entertainment.
- 185 The ongoing use and management of the proposed convention centre as a place of public entertainment, is to be carried out in accordance with the applicable conditions prescribed within Schedule 3A of the Environmental Planning and Assessment Regulation, 2000. Applicable conditions are as follows: -
- (a) Public entertainment provided within the convention centre must not involve:
 - (i) the discharge of ammunition from a firearm, or
 - (ii) the use of any material or thing giving off a level of heat or toxicity that poses a threat of harm to patrons or members of the audience, or

- (iii) the use of fireworks unless the use of the fireworks is in accordance with a licence granted under the Explosives Act, or
- (iv) the use of a sharp implement in a manner that poses a threat of harm to patrons or members of the audience, or
- (v) the screening of a nitrate film.

(b) Stage management

During a stage performance, there must be at least one suitably trained person in attendance in the stage area at all times for the purpose of operating, whenever necessary, any proscenium safety curtain, drencher system and smoke exhaust system.

(c) Proscenium safety curtains

If a proscenium safety curtain is installed at a place of public entertainment:

- (i) there must be no obstruction to the opening or closing of the safety curtain, and
- (ii) the safety curtain must be operable at all times.

(d) Projection suites

- (i) Where there is a projection suite at a place of public entertainment, the requirements of NSW Part H101.17 in Volume One of the *Building Code of Australia* must be complied with.
- (ii) When a film is being screened at a place of public entertainment, at least one person trained in the operation of the projectors being used and in the use of the fire fighting equipment provided in the room where the projectors are installed (the "projection room") must be in attendance at the place of public entertainment.
- (iii) If the projection room is not fitted with automatic fire suppression equipment and a smoke detection system, in accordance with the *Building Code of Australia*, the person required by subclause (2) to be in attendance must be in the projection suite in which the projection room is located during the screening of a film.
- (iv) No member of the public is to be present in the projection suite during the screening of a film.

(e) Marking of aisles and cross-overs

If it is intended that the audience at a performance be seated on the floor, aisles and cross-overs are to be clearly defined on the floor.

(f) Seating in rows

Seating set out in rows must comply with relevant provisions set out in:

- (i) in the case of seating set out in any kind of building-NSW Part H101.11 in Volume One of the Building Code of Australia.
- (g) Seating in paths of travel to designated exits
- The audience at a performance must not be seated, and seating must not be located, in aisles or other paths of travel to designated exits.
- (h) Aisle lights to be on
- Aisle lights referred to in NSW Part H101.20.3 in Volume One of the *Building Code of Australia* must be on when the public is in attendance and the main auditorium lighting is dimmed or off.
- (i) Locks
- Any key-operated fastening fitted to an exit door or gate used by the public as a main entrance must be arranged so that, whenever the public is in attendance, the tongue or bolt is locked in the retracted position to enable the door or gate to yield to pressure from within.
- (j) Rope barriers
- If a rope barrier is used across or at the side of an aisle:
- (i) the barrier must be secured with spring clips that become unfastened when pressure is exerted on the rope, and
- (ii) the barrier must have a centre fastening only, and
- (iii) the barrier must not trail on the floor when released.
- (k) Emergency evacuation plans
- (i) An emergency evacuation plan must be prepared, maintained and implemented for any building (other than a temporary structure) used as a place of public entertainment.
- (ii) An "emergency evacuation plan" is a plan that specifies the following:
- the location of all exits, and fire protection and safety equipment, for any part of the building used as a place of public entertainment,
 - the number of any fire safety officers that are to be present during performances,
 - how the audience are to be evacuated from the building in the event of a fire or other emergency.
- (iii) Any fire safety officers appointed to be present during performances must have appropriate training in evacuating persons from the building in the event of a fire or other emergency.

(l) Council may require fire safety information

The owner or occupier of a building that is used as a place of public entertainment must, if required to do so at any time by the council of the area in which the building is located, furnish to the council a certificate from a registered testing authority (within the meaning of the Building Code of Australia) or other approved testing authority, as to the early fire hazard or flammability properties of the finish of a wall, ceiling or floor, or of a curtain, blind or cinematograph screen.

(m) Upholstery, curtains or blinds

Any upholstery, curtains or blinds must, on installation (including replacement), comply with any relevant specifications set out as follows:

- (i) in the case of any upholstery, curtains or blinds installed in any kind of building-Specification C1.10a and NSW Specification C1.10 in Volume One of the Building Code of Australia.



Department of
Infrastructure, Planning and Natural Resources

Your Ref: DA-2660/2004
Our Ref: ER6193

6 January 2005

General Manager
Wyong Shire Council
PO Box 20
WYONG NSW 2259

Attention: Darryll Quigley

Dear Mr Quigley

General Terms of Approval - Rivers and Foreshores Improvement Act 1948 and Water Act 1912
DA-2660/2004 - Proposed Resort Facility
37-47 The Entrance Road West, 4&11 Bent Street, 5,7&9 Oakland Avenue
and 2,3&4 Clifford Street The Entrance

Reference is made to your referral of 22 December 2004 for the proposed integrated development application (DA). The Department of Infrastructure, Planning and Natural Resources (DIPNR) Hunter Region has reviewed the application in relation to general terms of any approval proposed to be granted under the *Rivers and Foreshores Improvement Act 1948 (RFIA)* and *Water Act 1912 (WA)* in relation to the development.

Please find attached general terms of approval (GTA) for a permit under Part 3A of the *RFIA* and a licence under Part 5 of the *WA* for the proposal. If development consent is granted, it is requested that these GTA form part of the consent and be included in their entirety.

If there are amendments to the proposal that impact or result in additional development/works, the consent authority is required to refer the amended application to DIPNR for review. In such instance, DIPNR will need to assess if the issued GTA are to remain unaltered or require modification. Consent granted to an amended DA that has not been formally referred to DIPNR for review is considered invalid.

To ensure that only approved works are carried out, DIPNR recommends that the following condition is included in any consent granted by the consent authority for this application:

"The Construction Certificate will not be issued until the consent authority is provided with documentary evidence that the Department of Infrastructure, Planning and Natural Resources has granted a permit under Part 3A of the *Rivers and Foreshores Improvement Act 1948* and a licence under Part 5 of the *Water Act 1912* for the proposal."

Under Section 91A(6) of the *Environmental Planning and Assessment Act 1979*, the consent authority must notify DIPNR (approval body) of the determination of the DA. A copy of the determination should be sent to this office.

Please contact me on (02) 4929 9822 at the Newcastle office with any query in relation to the GTA.

Yours sincerely

Vicki McBride
SNRO (Resource Access)
Hunter Region

**DA-2660/2004 - Proposed Resort Facility
37-47 The Entrance Road West, 4&11 Bent Street, 5,7&9 Oakland Avenue and
2,3&4 Clifford Street The Entrance
Rivers and Foreshores Improvement Act 1948
General Terms of Approval**

ER6193

Standard

1. The general terms of approval (GTA) relate to development / works on *protected land*, defined by the *Rivers and Foreshores Improvement Act 1948 (RFIA)* within the proposed development site.
2. The GTA do not constitute an approval under the *RFIA*.
3. If the consent authority determines to grant consent, the GTA are to form part of the development consent.
4. Any amendments to the development application may void these GTA.
5. The approval holder must submit, to the Department of Infrastructure, Planning and Natural Resources (DIPNR) Hunter Region, a completed application form for a permit under Part 3A of the *RFIA* prior to the commencement of any development / works on *protected land*.
6. The permit application is required to accord with the GTA.

Permit Application

7. The approval holder must provide the following with the permit application:
 - (a) A copy of the development consent.
 - (b) A costing based on current industry rates for all development / works that are subject to the GTA. The costing is to cover, but may not be limited to:
 - construction of any stream works, stormwater outlets, associated scour protection and their revegetation;
 - implementation of a vegetation management plan, including monitoring, reporting and maintenance;
 - decommissioning of any temporary works on protected land, including erosion and sediment controls, other pollution controls or water diversion structures.
 - (c) Stormwater and scour protection design plans prepared by a person with relevant knowledge, qualifications and experience to industry standards.

Relevant Plans and Documents

8. The approval holder must ensure that development / works are completed in accordance with the following drawings and / or documents:
 - (a) Ingham Planning Pty Ltd. November 2004. Statement of Environmental Effects to accompany a development application for a managed resort facility known as The Entrance Resort at The Entrance Road and Oakland Avenue, The Entrance.
 - (b) Thrum Architects. 06/12/04. The Entrance Resort. Site Plan.

Works

9. The approval holder must ensure that all works proposed are designed, constructed and operated to minimise:
- sedimentation, erosion and scour of the banks or bed of Tuggerah Lake, and;
 - adverse impacts on aquatic and riparian environments.
10. The approval holder must ensure that work-as-executed survey plans, prepared to a professional standard are provided to DIPNR upon request.

Riparian Zone

11. The approval holder must ensure that construction techniques minimise disturbance to soil and vegetation on *protected land* and within the riparian buffer zone.

Stormwater

12. The approval holder must ensure that stormwater outlets are designed, located and constructed to minimise any erosion or scour of riparian buffer zones and the bed or banks of Tuggerah Lake.

DA-2660/2004 - Proposed Resort Facility
37-47 The Entrance Road West, 4&11 Bent Street, 5,7&9 Oakland Avenue and
2,3&4 Clifford Street The Entrance
Part 5 of the Water Act 1912
General Terms of Approval

ER6193

Standard

1. The general terms of approval (GTA) relate to the above development within the proposed development site.
2. The GTA do not constitute an approval under the *Water Act 1912 (WA)*.
3. If the consent authority determines to grant consent, the GTA are to form part of the development consent.
4. Any amendments to the development application may void these GTA.
5. The approval holder must submit, to the Department of Infrastructure, Planning and Natural Resources (DIPNR) Hunter Region, a completed application form for a licence under Part 5 of the *WA* prior to the commencement of any development / works.
6. The licence application is required to accord with the GTA.

Licence Application

7. The approval holder must provide the following with the licence application:
 - (a) A copy of the development consent.
 - (b) A copy of approval from the Department of Environment and Conservation under the *Protection of the Environment Operations Act 1997* for discharge to surface or ground waters.
 - (c) A licence fee of \$151 (by cheque made out to DIPNR).

Relevant Plans and Documents

8. The approval holder must ensure that development / works are completed in accordance with the following drawings and / or documents:
 - (a) Ingham Planning Pty Ltd. November 2004. Statement of Environmental Effects to accompany a development application for a managed resort facility known as The Entrance Resort at The Entrance Road and Oakland Avenue, The Entrance.
 - (b) Thrum Architects. 06/12/04. The Entrance Resort, Site Plan.

Works

9. The approval holder must ensure that bore/s are constructed in accordance with *Minimum Construction Requirements for Water Bores in Australia* (Agriculture and Resource Management Council of Australia and New Zealand : July 1997).
10. The approval holder must ensure that all drilling operations are carried out by a licensed driller.
11. The approval holder must, within two (2) months of completion or after the issue of the licence if the work is existing, furnish to DIPNR:
 - (a) Details of the work as set out on Form "A" attached to the licence.
 - (b) A plan showing accurately the location of the work in relation to property boundaries.
 - (c) Details of any water analysis and/or pumping tests.
12. The approval holder must allow DIPNR, or any duly authorised officer, unrestricted access to the works either during or after construction, for the purpose of carrying out any inspection or test of the works and its fittings.

13. The approval holder must carry out any work or make any alterations deemed necessary by DIPNR, for the protection or proper maintenance of the works, or for the control of the water extracted or prevention of pollution of groundwater.
14. If a work is abandoned at any time, the approval holder must notify DIPNR that the work has been abandoned and seal off the aquifer by:
 - (a) casing (lining) to the satisfaction of DIPNR; or
 - (b) such other methods as agreed to or directed by DIPNR.
15. The approval holder must ensure that works for the purpose of conveying, distributing or storing water are designed, constructed and operated to minimise obstruction to the passage of floodwaters flowing in, to, or from a stream, river or lake.
16. The approval holder must ensure that tailings or other materials are prevented from being washed into any stream, river or lake.
17. The approval holder must ensure that water is not pumped from the bore(s) for any purpose other than dewatering.
18. The approval holder must notify DIPNR of any proposed changes or modification to operations (eg. rate or duration of pumping).

Monitoring

19. The approval holder must install, to the satisfaction of DIPNR in respect of location, type and construction, an appliance(s) to measure the quantity of water extracted from the works. The appliance(s) is to consist of either a measuring weir(s) with automatic recorder, meter(s) or means of measurement approved by DIPNR.
20. The approval holder must ensure that the appliance(s) is maintained in good working order and condition.
21. The approval holder must ensure that a record of all water extracted from the works is kept and supplied to DIPNR upon request.
22. The approval holder must provide a test certificate as to the accuracy of the appliance(s), prepared to a professional standard by an appropriately qualified person, is provided to DIPNR upon request.
23. The approval holder must maintain water quality records for the bore and provide reports to DIPNR upon request.
24. The approval holder must undertake remedial action if monitoring results indicate that the agreed standards or performance indicator levels are not being achieved due to failure or ineffectiveness of the management strategies.

**DA-2660/2004 - Proposed Resort Facility
37-47 The Entrance Road West, 4&11 Bent Street, 5,7&9 Oakland Avenue and
2,3&4 Clifford Street The Entrance
Annexure - Advisory Notes**

ER6193

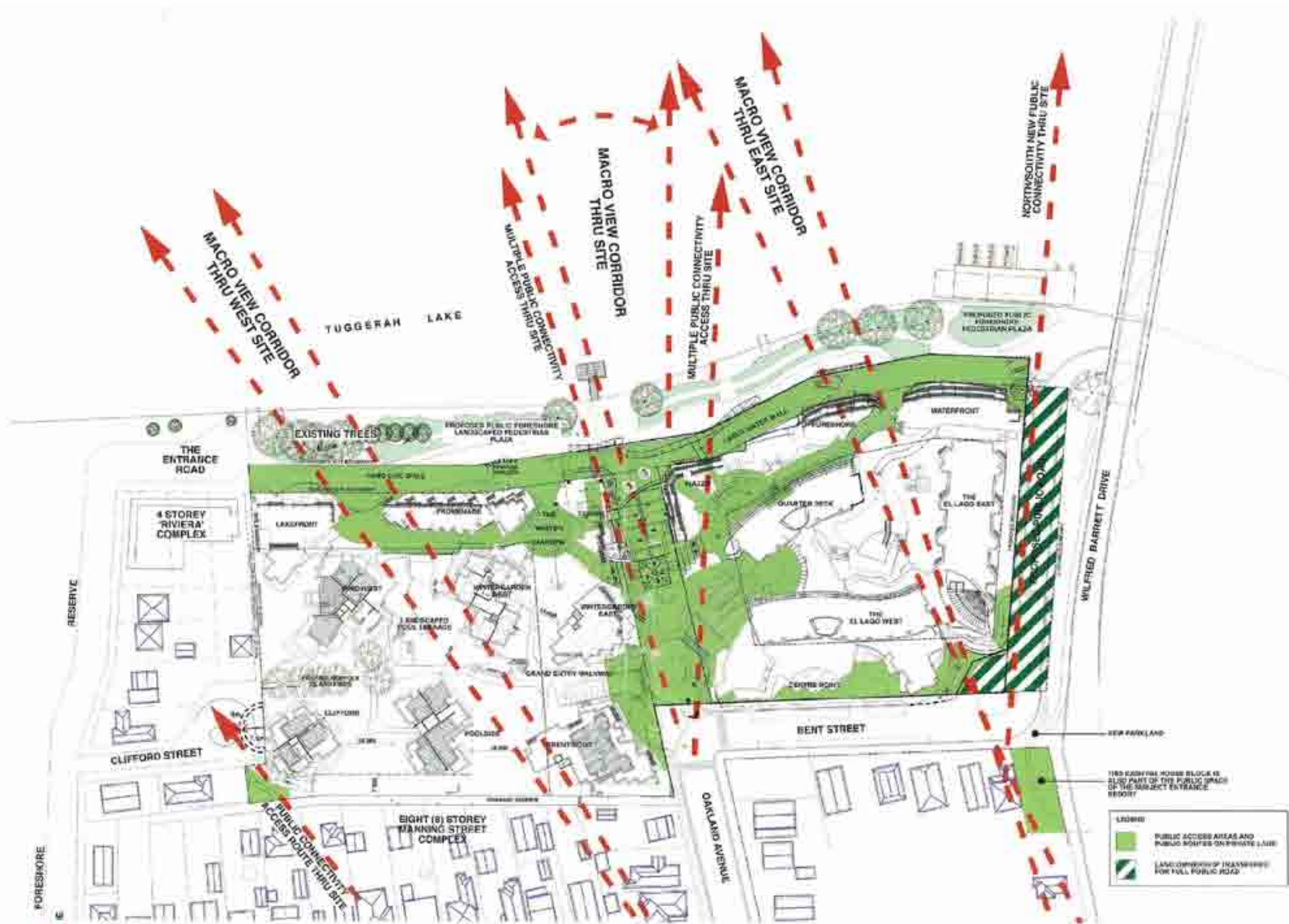
Advisory Notes

1. For the purpose of the GTA, the term approval holder refers to the applicant for the integrated development application.
2. Retrospective approval cannot be granted under the *RFIA*.
3. A permit cannot apply to works that have already been undertaken.
4. A licence / permit will not give the approval holder the right to use and occupy any land without the consent of the registered owner/s of the property.
5. A licence / permit will not relieve the approval holder of any obligations or requirements of any other acts, regulations, planning instruments or Australian standards.
6. A permit will not apply to works on Crown land, authorised under the *Crown Lands Act 1989 (CLA)*. *Note:* Use and occupation of Crown land requires approval from the Department of Lands.
7. A permit will not apply to development / works where there is a right lawfully exercisable or other right in force under any act relating to mining.

Definitions under RFIA

The meanings under the *RFIA* for the following are:

8. **Protected land** means:
 - (a) land that is the bank, shore or bed of protected waters, or
 - (b) land that is not more than forty (40) metres from the top of the bank or shore of protected waters (measured horizontally from the top of the bank or shore), or
 - (c) material at any time deposited, naturally or otherwise and whether or not in layers, on or under land referred to in paragraph (a) or (b).
9. **Protected waters** means: a river, lake into or from which a river flows, coastal lake or lagoon (including any permanent or temporary channel between a coastal lake or lagoon and the sea).
10. **River** means: any stream of water, whether perennial or intermittent, flowing in a natural channel, or in a natural channel artificially improved, or in an artificial channel which has changed the course of the stream of water and any affluent, confluent, branch, or other stream into or from which the river flows and, in the case of a river running to the sea or into any coastal bay or inlet or into a coastal lake, includes the estuary of such river and any arm or branch of same and any part of the river influenced by tidal waters.



Client: Terrapin Growth and Lodge Pty Ltd

THE ENTRANCE RESORT
 TOURISM RESORT AND RESIDENTIAL DEVELOPMENT
 THE ENTRANCE COAST

PHASE 1 PUBLIC ACCESS AND CONNECTIVITY THRU SITE PLAN
 Scale: 1:500
 Date: 2024
 679



Client:
Terrigal Growth and Leisure Pty Ltd

THE ENTRANCE RESORT
LEISURE RESORT AND RESIDENTIAL DEVELOPMENT
100-102 MACQUARIE ROAD
THE ENTRANCE NSW 2261



Scale 1:500 - 0 1m	TITLE PLAN DATE: 11/11/2010	679 GA-60001
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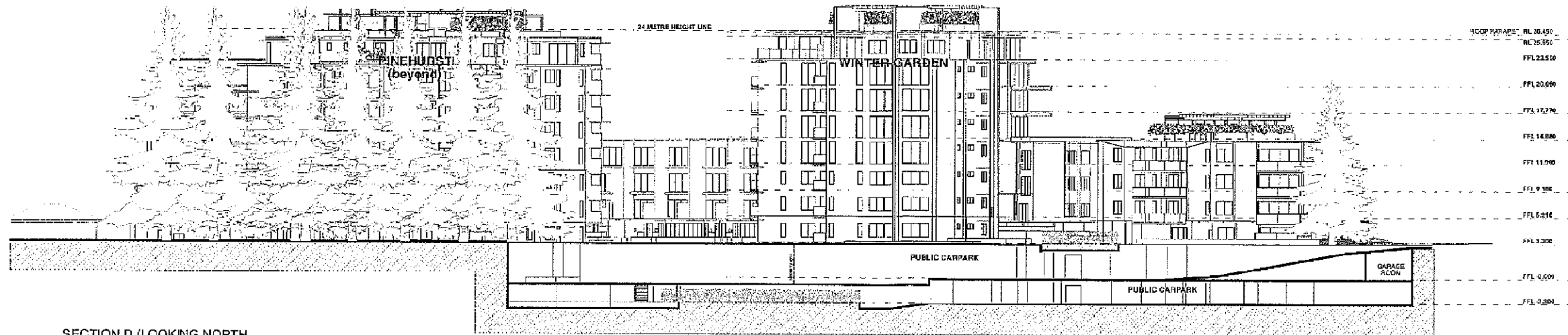
9.00 am Shadows - 21 June



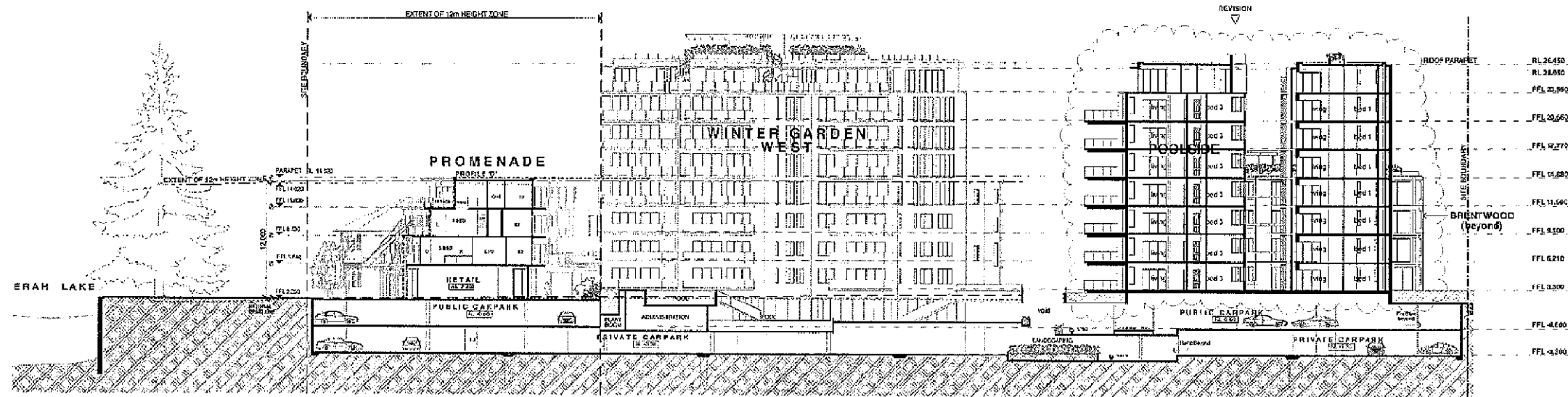
3.00 pm Shadows - 21 June



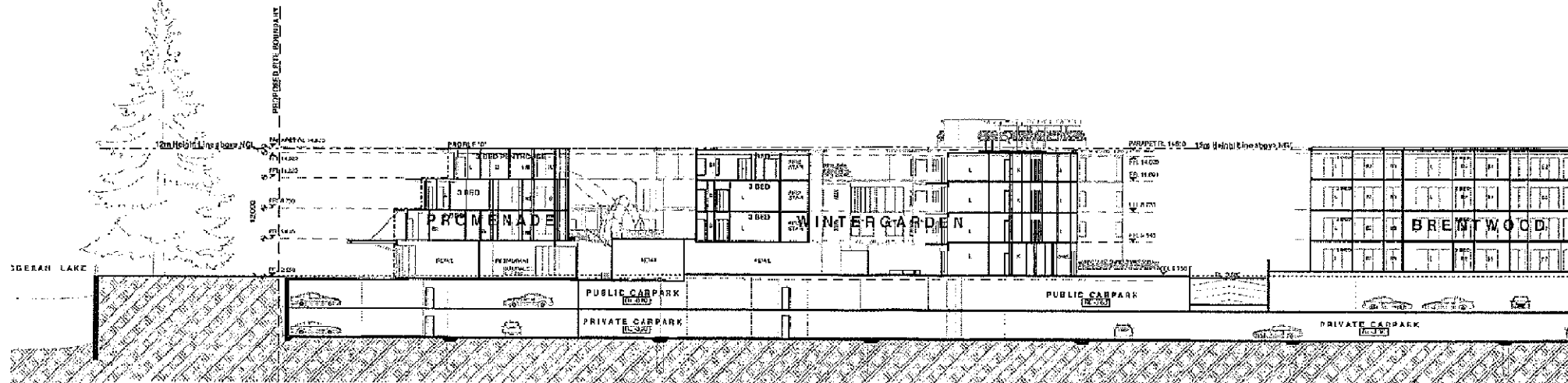
12.00 Noon Shadows - 21 June



SECTION D (LOOKING NORTH)



SECTION E (LOOKING EAST)



SECTION F (LOOKING NORTH EAST)



NORTHERN SITE ELEVATION VIEWED FROM TUGGERAH LAKE, LOOKING SOUTH SCALE 1:200



SOUTHERN SITE ELEVATION VIEWED FROM BENT STREET LOOKING NORTH



<p>Client: The Legal Governor, Lordship Pty Ltd</p>	<p>THE ENTRANCE RESORT TOURIST BEACHTOWN RESIDENTIAL DEVELOPMENT</p>		<p>NORTH & SOUTH ELEVATION - WLS1</p>	<p>679</p>
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TITLE MINUTES OF CENTRAL COAST REGIONAL ORGANISATION OF COUNCILS (CCROC) MEETING HELD 16 SEPTEMBER 2009

Directorate: General Manager
Business Unit: General Manager

MEETING NUMBER

Meeting No RO/09/02 commenced at 9.00 am at Wyong Shire Council.

ATTENDANCE

Present: Cllr Bob Graham, Mayor, Wyong Shire Council (Chair)
Cllr John McNamara, Wyong Shire Council
Cllr Lynne Webster, Wyong Shire Council
Cllr Laurie Maher, Gosford City Council
Cllr Jim Macfadyen, Gosford City Council
Kerry Yates, General Manager, Wyong Shire Council
Peter Wilson, General Manager, Gosford City Council

Guests: Glenn Weymer, Roads and Traffic Authority (RTA)
Leonie Baldwin, Central Coast Premiers Office
Steven Green, Gosford City Council

Apologies: Cllr Chris Holstein, Mayor, Gosford City Council

COMMITTEE CHANGES

Election of Chair: Mayor Bob Graham (Maher/McNamara)

DECLARATION OF PECUNIARY INTEREST

The Chairperson invited Committee members to declare any pecuniary interest they might have, in accordance with Section 451 of the Local Government Amendment Act 2000, in respect to the agenda for this meeting.

No declarations were received.

DECLARATION OF NON-PECUNIARY INTEREST

The Chairperson invited Committee members to declare any non-pecuniary interest they might have, in accordance with Section 440 of the Local Government Act 1993 and Council's Code of Conduct, in respect to the business of this meeting.

No declarations were received.

CONFIRMATION OF PREVIOUS MINUTES

THE COMMITTEE RESOLVES (McNamara/Maher) that the minutes from meeting RO/09/02 on 17 June 2009 be confirmed

AGENDA ITEMS**RO.001 CCROC SPONSORSHIP PRESENTATIONS**

Sponsorship cheque in the amount of \$500 was presented to Grant Rollo to compete in the 2009 International Triathlon Union World Age Group Long Distance Championships to be held in Perth 22-25 October 2009.

RO.002 CENTRAL COAST ROAD AND TRANSPORT ISSUES - RTA SESSION

Mr Glenn Weymer, Central Coast RTA office was in attendance for the special RTA session which is held at each CCROC meeting to discuss road and transport issues on the Central Coast.

A copy of the update provided to the Committee is attached.

THE COMMITTEE RESOLVES (Graham/Macfadyen) that:

- 1 The information be noted.
- 2 The RTA investigate moving forward with the design of the Sparkes Road/Wamervale Township intersection as quickly as possible to avoid any delays with the development of the Township.
- 3 The RTA investigate the access by trucks into Eagles Plumbing Supplies on the Central Coast Highway at Long Jetty, including the parking in this area.

RO.003 REGIONAL PERSPECTIVE

Ms Leonie Baldwin, Central Coast Premier's Office Co-ordinator provided an update on State Government regional issues.

Issues addressed included:

- a The new Minister for the Central Coast, the Premier Nathan Rees. Discussions taking place on how the portfolio is to be managed.
- b Central Coast Identity - suggestions to Premier:
 - Dealing with the ABS issues
 - Encouraging DG's to focus on Central Coast and report on Central Coast
 - A Working Party be established for the Central Coast
- c Keep Them Safe Program

- d Homelessness:
 - Lack of funding for Central Coast
 - Development of Regional Action Plan and Template (by March 2010)
- e HMAS Adelaide:
 - Sinking anticipated in April 2010
 - EOI advertised for lead up events
- f REDES:
 - Final report prepared
 - Lead agencies developing action plans
 - RDA will implement
- g Disaster Recovery

THE COMMITTEE RESOLVES (Maher/McNamara) that the information be noted.

RO.004 FUTURE DEVELOPMENTS THAT IMPACT ON THE CENTRAL COAST

Railcorp representative, Mr Richard Shepherd, was in attendance to discuss issues of future developments that impact on the Central Coast, especially the road network and road upgrades.

Issues addressed included:

- a Commuter Carparking Developments
 - Tuggerah (extra 100 spaces) : complete 2010
 - Ourimbah (50 spaces) : complete mid 2010
 - Wyong (200 spaces) : complete late 2010
 - Woy Woy (292 spaces) : complete late 2010
- b Northern Sydney Freight Corridor Upgrade - Involves separation of the passenger services from freight to remove obstructions
- c North Warnervale Station:
 - Plan of Management being prepared to allow for resolution of DA
 - Construction due to commence in 2013.

THE COMMITTEE RESOLVES (Maher/MacFadyen) that the information be noted.

RO.005 TRENDS IN MODE OF TRANSPORT TO WORK ON THE CENTRAL COAST

Mr Steven Green was in attendance to present a report which was forwarded to CCROC members prior to the meeting. A copy of the report is attached to the minutes.

THE COMMITTEE RESOLVES (Graham/Maher) that:

- 1 The information be noted.
- 2 Information be obtained on the current capacity of trains leaving the Central Coast during peak hour and possible impacts on usage.

- 3 The RTA be requested to provide information on the development of commuter carparks adjacent to the F3.

RO.009 CENTRAL COAST ACADEMY OF SPORT

Mr Ian Robilliard was in attendance to provide an update. A package of information was provided.

THE COMMITTEE RESOLVES (Maher/McNamara) that:

- 1 The information be noted.

THE COMMITTEE RECOMMENDS (Maher/McNamara) that:

- 1 The two Councils increase their sponsorship of the Central Coast Academy of Sport from \$10,000 each to \$15,000 from 2009/10.
- 2 Invite the Central Coast Academy of Sport to approach the two Councils for project funding for specific events.
- 3 The Central Coast Academy of Sport be encouraged to prepare a Strategic Plan for their future development/activities.
- 4 Wyong Council discuss accommodation arrangements between Mingara and the Central Coast Academy of Sport.

ITEMS FOR DISCUSSION**RO.006 EXTENDED PRODUCER RESPONSIBILITY - ELECTRONIC WASTE**

A report was prepared for CCROC's consideration - see Attachment C

THE COMMITTEE RESOLVES (Wilson/McNamara) that the information be noted.

RO.007 FUTURE OF CCROC

THE COMMITTEE RECOMMENDS (Maher/Macfaoyen) that the two Mayors or Council representatives and General Managers review the operation of CCROC including suggestions such as:

- Greater use of the Joint Meetings of Council
- Reporting on joint activities of the two Councils
- Reporting directly to individual Councils when appropriate.

RO.008 CCROC SPONSORSHIP PROGRAM

- 1 Financial update
- 2 Reports from successful applicants

THE COMMITTEE RESOLVES (Graham/Wilson) that the information be noted

Action by the Committee

RO.002 CENTRAL COAST ROAD AND TRANSPORT ISSUES - RTA SESSION
RO.005 TRENDS IN MODE OF TRANSPORT TO WORK ON THE CENTRAL COAST
RO.009 CENTRAL COAST ACADEMY OF SPORT

Attachments: A RTA Update
B CCROC Memo Trends on CC Mode Shift Compared to Sydney
C CCROC Report for the meeting 16 September 2009 re Extended Producer Responsibility - Electronic Waste

NEXT MEETING

Date: Wednesday, 16 December 2009
Time: 9.00 am
Venue: Gosford City Council

CLOSE OF BUSINESS

The meeting closed at 12.00 pm.

RECOMMENDATION

- A The Minutes of the Central Coast Regional Organisation of Councils (CCROC) be received and noted.
- B RO.009 CENTRAL COAST ACADEMY OF SPORT
The two Councils increase their sponsorship of the Central Coast Academy of Sport from \$10,000 each to \$15,000 from 2009/10.
- C RO.007 FUTURE OF CCROC
The two Mayors or Council representatives and General Managers review the operation of CCROC including suggestions such as:
- Greater use of the Joint Meetings of Council
 - Reporting on joint activities of the two Councils
 - Reporting directly to individual Councils when appropriate.

ATTACHMENT A

CCROC AT WYONG SHIRE COUNCIL – 16 SEPTEMBER 2009
CENTRAL COAST ROADS – RTA UPDATEGosford

- Central Coast Highway, Brisbane Water Drive, Manns Rd – At Phase 3 in a four-phase process. Access options reduced from 15 to 7 considered feasible, filtered out on "Geometric Standards" and "Solely in Design" criteria. Second focus Group meeting scheduled for 22 September to collect community feedback, agreed it is remaining in place to assist the project team to create a short list. Further briefings to occur following this in October/Nov 2009, aiming to finalise access options in early 2010.
- Central Coast Highway Erina Heights:
Stage 1 Carlton Road to Marcham Road – Avoca (nee Connell Wagner) developing. RTF approved & environmental license issued by DECC. Utilities designed. Some property acquisitions still being negotiated. Early works by Hunter Road Services (Access Agreement) started in September 2009, between Serpentine Rd and Marcham Rd. Tenders called for the Main roadworks by major contractor, aiming to award in late 2009.
Stage 2 Marcham Road to Ocean View Drive – Parsons Brinckerhoff developing. RTF approved, DECC license, boundaries confirmed & property acquisitions being negotiated.
- Central Coast Highway – Way Way Rd / Curving Rd upgrade – ARUP developing. RTF close to approval. Revised concept to be displayed soon. Dept of Education involved with grade-separated and ground level pedestrian access solutions.
- Avoca Drive – Sun Valley Rd to Royside Dr – Early works by GCC on the connecting road from Koolang and Lakewood is complete. Main roadworks contract awarded to Seymour Whyte Construction and is substantially under way. Current construction program takes completion to late 2010.
- Pacific Highway, Usarow to Narara – Hyde Consulting developing. Major studies under way are flooding and traffic, route scenarios being tested for feasibility, before a set of detailed route options come out for comment in early 2010. Meeting with the concerned residents was made contact with at the public meeting as required.

Wyong

- Pacific Highway Wyong Township – Completed the review of the Chamber of Commerce's option for travelling through the township and identified specific issues against this option. Refined the design as a relayed in 2008 for approval through the township to allow movements at Rose Street. Awaiting traffic figures from Dept of Planning from the proposed intensification of development at Tuggerah for input into the running of the traffic model to predict performance in future years.
- Sparks Road, R3 to Pacific Highway – the concept has reached a stage where no work is being done at the moment. WSC staff have approached RTA about the Albert Warner Drive intersection asking for contribution of funds to upgrade.

- Central Coast Highway, Long Jetty / The Entrance – WSC staff have briefed RTA Strategic Network Planning staff on the Council's planning work. Road widening planning is to be covered by RTA. The Central Coast Highway serves as an important access road, but is not a strategically critical section of state road, and is less critical than many other sections of road on the Central Coast.
- Pacific Highway, Tuggerah Straight – Stage 2 – Midson Rd to Johnson Rd – Naco Civil. Needing completion. Some utility issues restricting progress. Finish on target for completion mid 2009.
- Pacific Highway Currimban Stage 2 – Glen Rd to Burns Rd – Hunter Road Services (won by open tender). For the full length, traffic now using construction pavement. The new link road between Burns Rd & the old Pacific Highway is well under way. Work scheduled for completion first qt 2010, but will be opened progressively.

Wyang & Gosford

- Pacific Highway Currimban Stage 3 – Railway Rd to Glen Rd – Lyler Consulting. Finding land preferred except (short of Railway St) late 2009. Community input being used to develop the preferred concept.
- Traffic Management System – Infrastructure includes crosswalks, Variable Message Signs, cameras, emergency traffic signals, emergency storage sheds and trailers. Infrastructure being delivered a month earlier than initially identified, and this is still due to be completed by Dec 2009.
- Reclassification Review – handover process being followed. Targeting acceptance of new State Roads in Gosford LGA is October 2009.
- NSW Police/RTA contacts – RTA now regularly meeting with local Police commands to improve knowledge of unreported crashes.

ATTACHMENT B

To PETER WILSON - SECRETARY OF CCROC

From STEVEN GREEN - ADVISOR TRANSPORT & INFRASTRUCTURE
INTEGRATED PLANNING

Date 16 September 2009

Internal Reference 6366293

Subject TRENDS ON THE CENTRAL COAST IN MODE OF TRANSPORT TO
WORK, INCLUDING COMPARISONS WITH SYDNEY

At the 17 June 2009 meeting of CCROC, Mr Steve Green presented a report which included references to the trend change in car ownership comparisons between the Central Coast and Sydney. The Committee requested (Item RO.005) that a report be prepared on the mode shift over the last 15 to 20 years and how it compares with other Sydney regions. This report provides the requested information for the committee members to consider.

A Regional Strategy that relates to the Central Coast is a brochure produced in conjunction with the NSW Business Chamber Central Coast- Towards a Sustainable NSW Central Coast Region. Some of the interesting statistics in the brochure are the 2006 Central Coast **Mode of Transport to Work** and the **Change in Car Ownership** on the Central Coast 2001 - 2006.

The Australian Bureau of Statistics data shows that car ownership on the Central Coast has outgrown population growth for the years 1996 to 2006. The 2006 Census showed this trend has slowed somewhat, however car ownership growth is still greater than population growth.

The current transport system has proven to be unattractive for commuters to make use of bus and rail services, which is exacerbated by a congested road network at peak times. As a result the average number of cars per household is growing. The ABS data shows that from 2001 to 2006 the number of 2 car households had increased by 11% while 3 cars or more households had increased by a staggering 26%. In terms of the latest car ownership levels (2006), the Central Coast is similar to Sydney as shown in Figure 1.

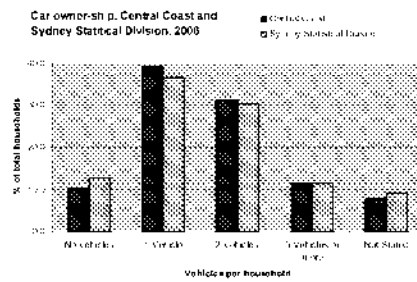


Figure 1

Figures 2 and 3 provide quantified evidence of how various transport modes have been utilised for Central Coast journeys.

Figure 2

Figure 3

Table 1: 2006 Census Data Journey to Work Transport Modes

	Central Coast	Sydney
Car as driver	72,000	74.2%
Car as passenger	7,500	7.7%
Train	9,100	9.3%
Bus	1,500	1.5%
Other	7,000	7.3%

ABS data 2 and Table 1 74.2% of all workers driver only in a include

All trips for any weekday data from the Transport Population Data Centre (TPDC) shown in Figure 3 paints an even grimmer picture for the public transport system as bus & train combined represent less than 6% of all journeys undertaken by Central Coast residents. In fact, Figure 9 in the attached "Transfigures: Statistics for the Subregional Planning Process" report by TPDC shows that the Central Coast has the lowest public transport usage of all twelve Sydney subregions.

Figure 4

Figure 2 (and 4) detail the trend of transport types for the mode of transport to work over a 25 year period. Car as driver, continues to climb rapidly and trends at over 5% p.a. whilst public transport and non-car based travel has decreased since 2001. Most concerning is the significant reduction in bus travel since 1991 with an overall 25yr negative trend of -2.5% p.a.. The significant 30% increase from 1986-1991 in car travel for both driver and passenger can be attributed in part to the opening of the Mooney Mooney Creek Bridge, however the continued upward trend beyond this date, can only be attributed to a rejection of public transport modes as can be seen in the immediate and overall downward trend of all other transport modes between 1991-2006.

This continued increase in car usage has contributed significantly to the current congestion issues experienced on the Central Coast during peak hours.

Public Transport

Local Travel

The North-South transport corridor of the Central Coast is serviced by the existing Great Northern Rail line operated by Railcorp. Due to local topographical features and basic economies, a heavy rail system to serve the east-west transport corridors is obviously not feasible. The rest of the Central Coast is catered for by bus services and taxis.

In 2001 Central Coast school services accounted for 42% (Sydney 29.8%) of all bus transport services, and education passenger trips accounted for 57.9% of all bus passenger trips during the weekday. Commuting accounted for only 11.5% of bus passengers, which represented less than 2% of all commuter movements. In addition low-income earners (less than \$20,000 p.a.) accounted for 75% of bus users.

Of the 97,530 trips to work made by employed people on the Central Coast in 2006, only 1.54% used buses as a mode of transport to work, and had been on the decline for the previous 10 years. The question arises as to why there is so little use of buses? This can be answered by these major contributing factors:

1. **Limited Timetables.**

Many routes do not provide services within time frames that are needed for commuters, especially those who commute by train to Sydney or Newcastle.

2. **Lack of Coverage and Circuitous Routes.**

Due to the low-density "village" nature of central coast development that follows natural topography of hills valleys and coastal and open water frontages bus services tend to be located only upon main road routes. Due to the limited number of routes, many commuters would need to drive to reach bus stops, by which time most people will be inclined to continue their journey in the car. This is also a major issue for those who are elderly or disabled and do not have access to private transport, this greatly hinders their mobility and self-reliance thus placing greater strain on community operated services. Connectivity between services can be an issue, especially if delays are experienced

3. Travel Times

Buses share the same congested routes as cars. In addition many bus routes are long and sometime circuitous which only adds to the travel time as buses stop regularly to pick up and drop off passengers. The longer bus trips are often between 15-30mins longer than car travel.

Bus priority lanes are limited mostly to intersection treatments, where the advantage only exists if buses are able to reach the short priority lane & signals without being caught in the congestion.

4. Cost Perception

The cost comparison of private transport to public transport and which is more cost effective depends heavily on whether the commuter sees the journey cost as either a long-term whole of life cost or a short term cost.

On a purely cost driven analysis, the bus may or may not be a financially better option depending on the long term/short term outlook.

A simple cost analysis has been undertaken in March 2008 looking at a commuter travelling from Gosford to Erina Fair, and Terrigal to Gosford for one average working week. The results are shown below.

Table 2

As can be seen from Table 2, fuel costs are well below the cost of bus transport, however Whole of Life (WoL) costs, which incorporates all costs of owning a vehicle, are in excess of the costs for bus transport. However if we consider the continual use of private motor vehicles that account for almost 80% of weekday trips and the growth of vehicle ownership (which is greater than population growth) it can be concluded that Central Coast residents see the motor vehicle as an object of necessity, not an optional extra. As such it is likely that commuters are not considering WoL costs, or find that WoL costs do not outweigh the convenience and savings in travel time associated with private transport.

Therefore those who can afford to purchase a vehicle, will purchase one, and will be unlikely to consider the whole of life vehicle costs when comparing transport modes. Thus when confronted with costs of \$23.30 of fuel against \$40.00 for bus travel, the perception arises that public transport does not offer a cost effective solution -especially given that throughout Gosford free commuter parking is available.

Considering the four issues of cost perception, travel time, lack of coverage and limited timetables affecting bus use, bus transport does not at present represent an acceptable alternative to residents on the Central Coast compared to the convenience of personal motor vehicles.

Travel Outside Central Coast (to Sydney)

Travelling by public transport to areas outside the Central Coast is either via private motor vehicle or rail. The northern rail line connects the Central Coast with both Newcastle to the north and Sydney to the south and provides a regular timetabled service. Trains run approximately every half hour with greater frequency during peak periods.

Trips from place of origin to the main railway stations of Gosford & Woy Woy are made primarily by private vehicle, or where possible walking and cycling to the smaller village stations such as Narara and Point Clare, however this is only optional for a small number of travellers that are situated along the north south rail corridor. Buses are also used however as discussed above this is not a main transport mode.

Free parking is available at all stations and particular the main stations of Gosford, Woy Woy Wyong and Tuggerah. This provides commuters with little incentive not to drive to the station. Where the available off street carparking becomes full, commuters will then park in surrounding local streets.

Figure 4 shows that rail has seen only a small decrease in patronage for commuting purposes over the period 1981-2006, compared to the continual and higher increase in personal vehicles. In fact all public transport patronage including rail peaked in 1991 and all have been declining in patronage since. As the cost of a weekly rail ticket is cheaper than driving both in fuel cost and whole of life cost comparison the reasons for lower growth in the use of rail could be attributed to other factors such as

1. Limited access

Those who work near railway stations or in the city are more likely to catch a train than if they work in areas such as Castle Hill, Rouse Hill where no rail system exists.

2. Service Dissatisfaction

Those who work near stations but find the service lacking through overcrowding, poor timetabling, train not running on time, or some other factor related to the service.

3. Convenience

Those who feel that if they are going to spend time commuting it might as well be in the comfort of their car where they can use the radio, air-condition etc, and can leave home/work when ever they need without being governed by a timetable. Or are concerned with the extra travel time that may be associated with train travel -however this may be negated by travel delays due to traffic congestion. Multi-purpose trips are also easier utilising personal transport, such as a trip combining childcare -local retail - regional shopping centres.

Cost does form a major decision point where recreational travel is concerned. Weekend trips to Sydney are frequent for both singles and family units. Families will often travel to visit such places as the Zoo & Darling Harbour or to the Airport for a Holiday.

A basic comparison of travel costs in March 2008 for two separate family trips has been undertaken for a family of five (2 adults & 3 children). The trips are to Taronga Zoo from Gosford Station and Sydney Domestic Airport from Gosford Station. No travel was considered to the station as it has been assumed that this section would be by car regardless, and there are no parking costs in Gosford LGA. As discussed previously, the purchase and use of motor vehicles by Central Coast residents would appear to be a necessity especially for commuting purposes. Therefore in comparing the transport costs for recreational travel only fuel costs and not WoL costs have been considered.

Table 3

Table 4

Table 3 clearly shows that it is significantly cheaper and more time effective to travel by private vehicle. Table 4 shows that travelling to the airport only becomes more cost effective on public transport when they will be away for more than one week. In all situations the use of public transport significantly increases the trip time. This may not be the same during A.M & P.M. peak periods on the roads however recreational travel is usually outside these times and public transport also suffers from overcrowding during peak periods thus also making it less attractive at these times.

For those making a recreational trip to the Sydney City Centre or Special Events at Homebush Bay Olympic Site public transport is often seen as a better alternative based solely on the issues surrounding direct vehicle access and restriction on parking. However with respect to the Sydney City Centre, the number of parking stations that offer weekend flat rates continue to grow, making driving and parking more attractive.

Summary

Considering the cost and travel times involved with public transport, as well as the restrictions of timetables and connections, it is no wonder that people and families on the Central Coast are turning away from public transport as their first choice of transport.

Current RTA works on the Central Coast road network will provide some alleviation to congestion, however no major initiatives have been made with respect to the provision of connected bus priority lanes. Some additional intersection priorities have been provided or are planned, however there are no significant links -thus rendering the bus system vulnerable to the same congestion problems affecting car travel and reducing the appeal of buses as a choice of transport.

The inability of public transport to provide a viable alternative to private vehicles is placing a major constraint on reducing road congestion. The need to address these issues is critical before we begin to plan for future growth.

Steven Green

Attachment: *Transfigures: Statistics for the Subregional Planning Process*, dated 2006
report by TPDC



TransFigures

June 2009

Statistics for the Subregional Planning Process

About this issue

The NSW Government's Metropolitan Strategy, Regional Cities & Rural & Remote Places provides the framework for the implementation of the subregional-level strategy of the subregional level. To facilitate that process, the Sydney District Council (SDC) has been directed to prepare a Strategic and Regional Plan (SRP) for the Central Coast, combining local government areas with similar or related characteristics, issues and challenges (Figure 1). Based on these groupings, the NSW Department of Planning is currently developing subregional strategies in consultation with local government, State agencies and other relevant stakeholders.

The issue pertaining to transport and infrastructure used for the subregional subregions. The information included in this subregion Plan (SRP) is based on the 2006 Statistical Population Census (SPC) information¹ and the Australian Bureau of Statistics (ABS) 2001 Census of Population and Housing.

Subregional Level Subregions
 1. Central Coast
 2. Central Coast
 3. Central Coast
 4. Central Coast
 5. Central Coast
 6. Central Coast
 7. Central Coast
 8. Central Coast
 9. Central Coast
 10. Central Coast



Figure 1 - System of subregional strategy (10 subregions and 10 local areas)

Source: ABS (2006) and ABS (2001)

¹ For further details, please refer to the subregional strategy plan.

² The areas of 10 subregions included from June 2006 to June 2007. The areas of 10 subregions included from June 2008 to June 2009.

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TransFigures

June 2009

Statistics for the Subregional Planning Process

About this issue

The NSW Government's Metropolitan Strategy, Regional Cities, & Rural & Remote Places provides the framework for the implementation of the subregional-level strategy of the subregional level. To facilitate that process, the Sydney District Council (SDC) has been joined by the Central Coast and the Central Coast Council, combining local government areas with similar to-based characteristics, issues and challenges (Figure 1). Based on these groupings, the NSW Department of Planning is currently developing subregional strategies in consultation with local government, State agencies and other relevant stakeholders.

The issue gathering key regional and subregional data for the subregional subregions. The information included in this subregional Plan (SDC's recently released 2008 Metropolitan Regional Survey (MRS) subregion 7 and the Australian Bureau of Statistics (ABS) 2001 Census of Population and Housing.

Subregional Level Subregions
 1. Central Coast
 2. Central Coast Council
 3. Central Coast Council
 4. Central Coast Council
 5. Central Coast Council
 6. Central Coast Council
 7. Central Coast Council
 8. Central Coast Council
 9. Central Coast Council
 10. Central Coast Council



Figure 1 - System of subregional strategy 7 (The subregions are for Central Coast)

Source: ABS and NSW Department of Planning

For further details, please refer to the subregional strategy plan.

The areas of 10 subregions included from June 2008 to June 2009. The areas were created based on the 2008 subregion of the Metropolitan Strategy and the features in this report.

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ATTACHMENT C

TITLE Minutes of Central Coast Regional Organisation of Councils (CCROC) Meeting held 16 September 2009

Directorate: City Services
Business Unit: Waste and Emergency Services

BACKGROUND

This report provides the Central Coast Regional Organisation of Councils (CCROC) with a report in relation to a request from Shore Regional Organisation of Councils (SHOROC) regarding the support for the introduction of national legislation for Extended Producer Responsibility of Electronic Waste (E-Waste) including computers, televisions and peripherals.

SHOROC submitted a resolution to the Australian Local Government Association (ALGA) National General Assembly in June 2009 and the Assembly resolved to:

- *Call upon the federal government to coordinate a national approach to introduce full regulation to mandate extended manufacturer responsibility for the collection and recycling of designated e-waste, being computers, TV's and peripherals.*
- *Call upon the federal government to investigate the coordination of a national approach for full regulation to mandate extended manufacturer responsibility for other forms of e-waste.*
- *Call upon Council's across Australia to introduce bans on the disposal to landfill of designated e-waste (computers, TV's and peripherals).*

REPORT

Electrical and electronic products, in particular televisions and computers, constitute a significant element of Australia's material consumption, domestic environmental impact and waste to landfill. In 2007/08, 31.7 million new televisions, computers and computer products were sold in Australia, which is equivalent to 1.5 new units per person every year. In the same year 16.8 million units reached their end of life, which is close to one unit per Australian. Of these units, it is estimated that 88% were sent to landfill, with only 9% being recycled. Over the next 20 years, a significant volume of televisions, computers and computer products for disposal/recycling is expected to be generated, with expectations that the end of life volume will more than double. Waste volumes are increasing with shorter life spans of product and increasing ownership of electrical products, with the number of televisions, computers and computer products reaching their end of life expected to grow to 44.0 million by 2027/28.

Environment Protection and Heritage Council

The Environment Protection and Heritage Council (EPHC), made up of Australian Environment ministers met in May 2009 and made a commitment to finalising product stewardship arrangements for tyres, computers and televisions at its next meeting in November 2009. Ministers supported the development of a national e-waste product stewardship system, and welcomed the results of the modelling study on computers and televisions which showed that the community has a high willingness to pay for recycling end of life televisions and computers.

Australia's consideration of an approach for managing e-waste has been ongoing since the 1990s when national electrical and electronic waste management was put forward as an emerging priority by industry to the Australian and New Zealand Environment and Conservation Council (ANZECC),

the precursor to the current Environment Protection and Heritage Council (EPHC). In 2002 Environment Ministers agreed that national action was required in relation to waste electrical and electronic equipment. On behalf of the EPHC, a multi-jurisdictional working group, known as the Electrical Equipment Product Stewardship Sub-Group, examined the issue of waste electrical and electronic equipment and identified televisions and computers as first priorities for action as a result of their higher levels of hazardous components relative to other types of electrical products, and the lost opportunities for conserving non-renewable resources due to products being sent to landfill. In 2008, EPHC committed to the development of a national solution to the problem of end of life televisions and computers. In parallel with government consideration of the issues both the television and key players in the computer industries are keen to engage in large scale national action, with national regulatory support to ensure a level playing field in the market.

While each jurisdiction has its own regulation setting out waste minimisation policies, currently only the Australian Capital Territory Government has a ban on disposing television screens and computers monitors in its landfill. Other jurisdictions are considering bans and a number of take-back schemes have been trialled. In addition, a number of local governments across Australia have implemented or are considering bans or charges for disposing of e-waste in landfill. The number of responses to addressing television and computer waste, and more broadly e-waste, in Australia, demonstrates the significance of the issue to the community and the drive to take action.

Gosford and Wyong Council Electronic Waste Collections

Gosford City Council hosted electronic waste collections in 2006 and 2007, collecting a total of 25,000 kilograms per collection from over 500 vehicles. Due to the success of the collection program and public willingness for another collection, both Councils approached a number of electronic waste recyclers. Gosford and Wyong Councils in partnership with Thiess E-Services combined in early August 2009 to host a very successful E-Waste collection weekend, with over 100,000 kilograms of material presented for recycling from over 1200 vehicles, with the most popular items collected being computer monitors, hard drives, televisions, printers, keyboards and stereos. It should be noted that the total cost for the collection was in excess of \$70,000, of which Councils receive no State or Federal government or Industry support. However, given the overwhelming success of the collection weekend, both Councils are in negotiations with a high profile computer manufacturer to host another collection event later in the year, with vastly reduced collection costs to Council. In addition, Wyong Council are exploring opportunities for a drop-off scheme at Buttendery landfill for e-waste materials.

The banning of e-waste from landfill is not considered appropriate at this stage given the lack of national legislation and clarity of the economic ramifications for Councils, industry and the general community. To deny a legitimate waste disposal option to the community is irresponsible given there has been a 20 year debate on the issue and still with no clear mandated position. For example, e-waste collections are fully funded and organised by Councils and costs to date are in excess of \$70,000 per collection. The price per tonne to recycle e-waste is currently well in excess of disposal to landfill, approximately three times. For the public to recycle a computer including monitor and printer direct to the e-waste recycler would cost in excess of \$30. It is worth noting that no such ban exists for garden organics and recyclables materials such as paper, cardboard, plastics and glass.

However, the issue of Extended Producer Responsibility that the Environmental Protection and Heritage Council is working towards in regards to e-waste must be supported in principle, with the ultimate aim of reducing waste to landfill. Industry must be fully involved and accountable in the life cycle of e-waste related products.

Attachments: Nil

Tabled Items: Nil

FINANCIAL IMPACT STATEMENT

The recommendation does not have a financial impact on Gosford and Wyong councils.

RECOMMENDATION

- A The information be noted
- B That CCROC write to the Environmental Protection and Heritage Council to express its support for a national approach to extended producer responsibility for the collection and recycling of electronic waste.