

DCP
No.
109

Wyong Shire Council West Wyong Area Development Control Plan

Date of Commencement:

Wyong Shire Council

West Wyong Area

Development Control Plan

OBJECTIVES

This plan aims to provide a framework for the preparation of a masterplan that co-ordinates and guides future development to achieve an appropriate development pattern and yield which recognises and respects the constraints, attributes, the desired future character of the area, and the complexity of how the constraints and attributes interrelate to each other to achieve the desired future character by:

- Providing for integration and co-ordination of future development (mainly residential) with the existing land use pattern of Wyong and Watanobbi.
- Respecting the unique natural landscape features and environmental elements
- Protecting downstream environments and the water catchment.
- Providing a high quality residential environment that is accessible to the existing and future community, recreation and social service facilities.
- Providing a safe and efficient system of roads and pathways for vehicular, pedestrian and cyclist movements on the land to which this DCP applies, as well as providing links to places and facilities elsewhere in the Shire.
- Identifying, protecting and enhancing significant and viable vegetation communities, wildlife habitats and/or corridors and their connectivity.
- Identifying and protecting the visual significance of the area from local, mid-ground and distant perspectives.
- Providing for a suitable density and design of future development and activities.
- Ensuring future development is not located in hazardous areas, including flood prone, bushfire prone and potentially unstable land.

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

1.1 Aims and Objectives

This plan applies to land located west of Wyong Township, between the suburb of Watanobbi (De Lisle Drive) and Wyong TAFE College (Alison Road). Figure 1 shows the land covered by this plan.

This plan aims to provide a framework for the preparation of a masterplan that co-ordinates and guides future development to achieve an appropriate development pattern and yield which recognises and respects the significant constraints, attributes, the desired future character of the area, and the complexity of how the constraints and attributes interrelate to each other to achieve the desired future character by:

- Providing for integration and co-ordination of future development (mainly residential) with the existing land use pattern of Wyong and Watanobbi
- Respecting the unique natural landscape features and environmental elements
- Protecting downstream environments
- Providing a high quality residential environment that is accessible to the existing and future community, recreation and social service facilities
- Providing a safe and efficient system of roads and pathways for vehicular, pedestrian and cyclist movements on the land to which this Chapter applies, as well as providing links to places and facilities elsewhere in the Shire
- Identifying, protecting and enhancing significant and viable vegetation communities, wildlife habitats and/or corridors and vegetation connectivity
- Identifying and protecting the visual significance of the site
- Providing for the appropriate density and design of future development and activities
- Ensuring future development is not located in hazardous areas, including flood prone, bushfire prone and potentially unstable land

1.2 Application

This plan is a Development Control Plan Chapter prepared and adopted pursuant to Section 74C of the Environmental Planning and Assessment Act 1979 (the Act) and relevant clauses of the Environmental Planning and Assessment Regulation 2000. It is a document for the general guidance of Landowners in preparing a masterplan for future development of lands to which this Chapter applies and Council in the exercise of its duties and functions under the Act. The plan applies to all the land within the thick black line shown in Figure 1.

1.2.1 Relationship of this Plan to Other Documents

Wyong Local Environmental Plan 1991

This plan must be consistent with Wyong Local Environmental Plan 1991 (WLEP). Under WLEP, the land is zoned 2(a)(Residential Zone), 2(e)(Urban Release Area Zone), 5(a)(Special Uses – Drainage Zone), 5(a)(Special Uses – Technical College Zone), 5(c)(Local Road Reservation Zone), 6(c)(Proposed Open Space Recreation Zone) and 7(g)(Wetlands Management Zone), as shown on Figure 1. In the event of any inconsistency, WLEP takes priority over this Chapter.

Other Development Control Plans

The masterplan prepared under this Chapter must identify all other relevant Chapters which apply to the land to which this Chapter applies.

For certain issues, the masterplan will need to take priority to achieve the visions identified in Section 2 (page 6). The masterplan must distinguish where (for what issues) it takes priority over other relevant Chapters in a table format, similar to the example shown in Table 1.

1.3 Variations to Provisions

If, in the opinion of Council, a proposed masterplan satisfactorily complies with the aims and objectives described in this plan (*refer Page 1*) and does not adversely impact on the locality, variations to the provisions in this plan will be considered. Applicants must demonstrate that a superior outcome will be achieved as a result of the proposed variation.

Where variations are proposed, a proposed masterplan must be accompanied by a submission detailing:

- The particular provision which is proposed to be varied and the extent of the proposed variation
- The benefits of the proposed variation. It should be noted that Council's principal consideration with respect to variations will be to facilitate high quality design and not to increase development potential
- The impact of the proposed variation and its relationship to adjoining development
- How the proposal satisfies or improves on the objective of the provision to be varied

Issue	Chapter 109	Chapter 13	Chapter 14	Chapter 30	Chapter 58	Chapter 64	Chapter 76	Chapter 100
Character of West Wyong	Takes priority							
Building siting	Takes priority							
Extent of site disturbance (includes land clearing, vegetation and tree removal)	Generally takes priority		Applies in regard to assessments required					
Height of buildings	Takes priority							
Building on slopes								Applies
Colours and Finishes	Takes priority							
Landscaping (Bushland Suburb Character)	Takes priority							
Site features (including fences, clothes lines, etc).	Takes priority							
Criteria for development in conservation areas		Applies						
Noxious weeds removal			Applies					
Heritage							Applies	
Wetlands				Applies				
Vegetation Management Plans			Applies					
Dual occupancy dwellings	Takes priority in regard to site areas and floor space ratios				Applies except in regard to site areas and floor space ratios			
Medium and high density dwellings	Takes priority where the maximum FSR controls of Chapter 64 cannot be achieved due to site constraints					Applies		
Subdivision layout								Applies

Table 1 Example Of How To Show The Relationship Of The Masterplan To Chapters

Note: Table 1 is an example only and is not intended to be a comprehensive listing.

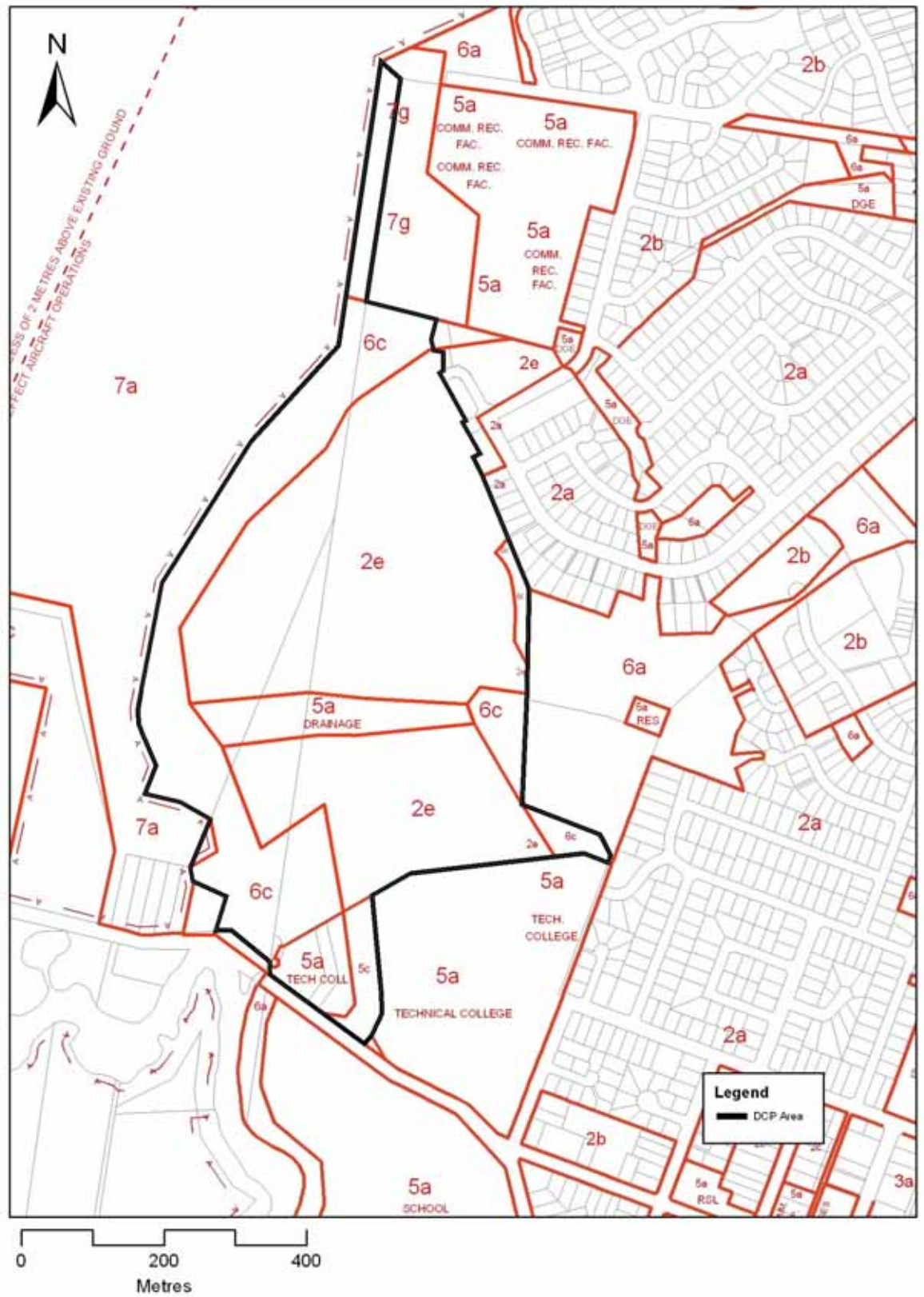


Figure 1 Area Covered By Chapter 109

1.4 Context

The area to which this plan applies is within the catchment of Porters Creek Wetland which acts as the natural flood storage area for Porters Creek, the Wyong River and the Tuggerah lakes System. Porters Creek Wetland is the most significant coastal wetland in Wyong Shire and the largest freshwater wetland on the Central Coast. Development of the land to which this plan applies must acknowledge this context and be designed appropriately.

Future development of the area must also have regard for its relationship with the unique visual character of the area. The elevated portions of the area are relatively heavily vegetated and visually prominent from a number of important vistas in the locality. The vegetated skylines and hillfaces of the area provide a visually significant backdrop which is considered an important element in the character of Wyong.

Vegetation in the area comprises locally and State significant communities, a number of threatened flora species, habitat for various threatened fauna species, and forms a significant corridor that connects part of Porters Creek Wetland to riparian habitats along Wyong River and to vegetation communities and habitats to the south. Future development must ensure that the integrity of these vegetation communities, natural habitats and vegetation connectivity are not compromised.

The visual prominence, presence of conservation significant vegetation communities, threatened species, and the topography of the area present challenges to investigate and provide appropriate development design options through masterplanning processes. The numerous constraints will influence the final development layout.

The site is subject to SEPP 71 – Coastal Protection and therefore must be developed in accordance with the requirements of this SEPP, which includes the preparation of a ‘masterplan’.

1.5 How is this Plan Structured?

Section 1: Identifies the land to which this Chapter applies, the aims, objectives, context and the relationship of this Chapter with other documents.

Section 2: Describes the desired future character vision for the West Wyong Area.

Section 3: Identifies the matters that need to be covered by a masterplan for the land to which this Chapter applies.

Section 4: Identifies other matters that need to be addressed by a masterplan prepared under this Chapter.

Section 5: References documents used during the preparation of this Chapter.

2.0 DESIRED FUTURE CHARACTER

2.1 Vision

The West Wyong Area to develop as a bushland suburb, with:

- Native vegetation remaining a dominant element in the landscape
- Future development unobtrusive when viewed from adjacent streets and important local, mid-ground and distant viewpoints in Wyong Shire, and
- Current ecological values maintained or, where possible, improved

3.0 MASTERPLAN REQUIREMENTS

3.1 General Requirements

To ensure that the land to which this Chapter applies is developed in a coherent and integrated manner, it is considered essential for a masterplan, that includes all the land covered by this Chapter, to be prepared and submitted to Council prior to any development application being lodged.

Alternatively, more than one masterplan could be prepared for land covered by this Chapter which is in individual ownership. However, such masterplans must demonstrate that development of the land will not adversely affect the environmental, landscape or scenic values of the subject or neighbouring lands or compromise the development potential of these lands.

OBJECTIVE

To achieve the Aims and Objectives described in Section 1.1 and Vision outlined in Section 2.

REQUIREMENTS

Masterplans prepared under this Chapter must identify appropriate strategies and/or requirements that:

- Reflect the Aims and Objectives described in Section 1.1, Vision outlined in Section 2 (page 6) and include provisions that ensure future development complies with all General and Specific requirements
- Are in accordance with the principles, guidelines and requirements in this Chapter, SEPP 71 and/or any other relevant legislation
- Articulate relevant planning and design details relating to the development of the area. This must include:
 - Location of development [including houses, roads, pedestrian footpaths, cycleways, open space areas] and vegetated areas
 - Development design [including energy efficient subdivision layouts and buildings and water sensitive urban design (including stormwater management)]
 - Protection and rehabilitation of viable vegetation communities, habitats and vegetation connectivity
 - Consideration of cumulative environmental impact
- Ensure the form and character of future development responds to the area's sloping landform, environmental characteristics and prominent visual position

- Ensure development of the site has regard to the principles of ‘*Safer by Design*’ and ‘*Healthy by Design*’
- Ensure development facilitates easy access and movement by linking existing and proposed development through a logical and functional system of roads and pathways
- Ensure future development of the area is consistent with an adopted concept layout plan

Due to the significance of the landscape and environmental constraints, applicants are encouraged to consult with Council, State Government agencies and any other relevant authorities, during the Masterplan preparation process.

Due to the significant constraints and attributes of the site and the interrelationships between these constraints and attributes, it is necessary that any masterplan must be approved by Council and the Minister, administering SEPP 71, prior to any development application for development (including subdivision) being lodged with Council.

3.2 Specific Requirements

The following sections detail more specific objectives and requirements applicable to the range of issues relevant to the preparation of a Masterplan for the land to which this Chapter applies.

3.2.1 Access and Movement

The proximity of the site to various community facilities and transport hubs (including Wyong’s CBD, TAFE College, high schools, primary schools, the Watanobbi playing fields and community centre, Wyong Train Station and the F3 Sydney to Newcastle Freeway) presents a number of opportunities.

OBJECTIVES

To provide for:

- An attractive, safe and efficient internal road network with links to the external system
- Viable public transport
- A safe, coordinated and accessible pedestrian and cycle circulation system through interconnected streets and pathways integrated with the existing road and pedestrian networks aimed at reducing private car dependency and facilitating connected communities and healthy living

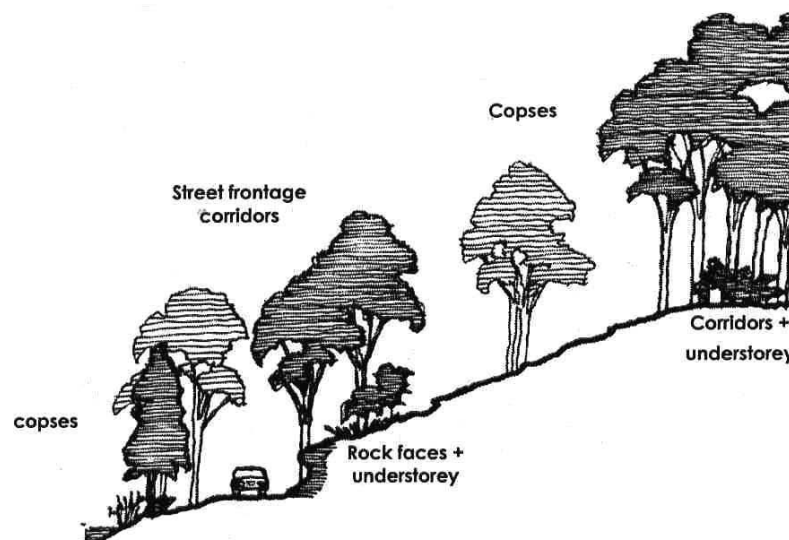
without compromising biodiversity values, landscape and scenic qualities of the area.

REQUIREMENTS

A Masterplan must identify appropriate strategies and/or requirements, based on adequate investigations and traffic studies, carried out by an appropriately qualified and experienced person(s), which provide for:

- Safe access and egress arrangements, by designing and constructing intersections, junctions and driveways which have appropriate geometry and are located with adequate sight distance in accordance with relevant AUSTROADS Standards
- Safe and efficient traffic movement within and through the site by clearly defining a road hierarchy, designing and constructing roads in accordance with relevant AUSTROADS Standards and installing appropriate signage, storage and vehicle turning facilities, traffic management and calming devices, and the like

- Effective linkages to and between neighbouring lands and areas by investigating and determining the feasibility of a road and/or pedestrian and cycle link through the West Wyong area, between Alison Road, and De Lisle Drive, Watanobbi
Note: Section 94 Contributions Plan No 1 – Wyong / Rural West is relevant to the West Wyong Area. It includes matters relating to road alignment and junction treatments.
- Viable and/or innovative public transport accessible to all persons (including children, the elderly and those with disabilities) by designing and constructing subdivision road layouts that include roads with appropriate geometry that will cater for buses and provide for bus stops to be located within 400 metres of most houses. The Ministry of Transport must be consulted on this issue
- The extension of existing bus services connecting to destination points, including town/shopping centres and train stations, are potential ways of providing viable public transport
- Pleasant, convenient, safe and accessible pedestrian and cycle facilities to cater for as many persons as possible (including children, the elderly and those with disabilities) by locating and designing paths and tracks that have low gradient and which link to identified destination points (eg, parks, shops, community and educational facilities, and the like) and allow for easy movement to, from and throughout the area and provide linkages to surrounding areas
- Pathways, seats, safe shortcuts away from road routes, vegetation strips separating pedestrians/ cyclists from road traffic, commuter parking interchange with adequate secure cycle parking facilities are potential ways of providing pleasant, convenient, safe and accessible pedestrian and cycle facilities
- Safe and efficient access for general (eg, garbage collection and the like) and emergency service (eg, fire fighting, infrastructure repair, and the like) vehicles by designing and constructing subdivision road layouts that include roads with geometry that will cater for such vehicles
- Agreed outcomes from consultation with Council's Senior Transportation Engineer
- Planting and retaining existing vegetation in road reserves and open space areas, to screen future development and provide streetscape amenity (refer Figure 2)
- Incorporating water sensitive urban design techniques (refer Section 3.2.3)



(Source: Gosford City Council DCP 159 – Character)

Figure 2

Vegetation Retention in Road Reserves Provide Screening and Amenity

3.2.2 Vegetation Protection and Management

The vegetation communities *Alluvial Floodplain Shrub Swamp Forest* and *Alluvial Floodplain Swamp Paperbark Thicket (floodplain variant)* occupy low lying parts of the area. The former is an endangered ecological community, identified as having State conservation significance. The locally significant *Narrabeen Dooralong Spotted Gum – Ironbark Forest* is located on the hillsface and skyline portions of the area.

Individuals of the threatened species *Melaleuca biconvexa* and Endangered Ecological Communities River Flat and Swamp Sclerophyll Forest Type are known to be present on the flatter parts of the area, in the north, south and west.

Squirrel Glider habitat, ranging from low to very high significance, has also been assessed as present. Some of this habitat has been nominated as part of a wildlife corridor by *Development Control Plan No 13 – Interim Conservation Areas for Wyong Shire*.

Potential owl roost trees and potential habitats for Yellow-bellied Gliders, and Bats are also known to be present in the area.

OBJECTIVE

- To ensure that development protects and improves significant vegetation communities, threatened species, threatened species habitats and vegetation corridor connectivity and long-term viability, while also protecting the landscape and scenic qualities of the area

REQUIREMENTS

A Masterplan must identify appropriate strategies and/or requirements for protection of all significant habitats and communities. The Masterplan must be supported by a comprehensive flora and fauna survey and conservation assessment, carried out by a suitably qualified and experienced person(s). The report must comply with Council's Flora and Fauna Survey and Assessment Guidelines and Chapter 13 – Interim Conservation Areas.

These strategies and/or requirements must:

- Identify the location of any vegetation communities, threatened flora and fauna species, threatened flora and fauna habitat of State and local significance in the area
- Obtain concurrence under Section 64 of the Environmental Planning and Assessment Regulations, 2000 by establishing a comprehensive program of on-site and/or off-site compensatory planting works capable of counterbalancing the development impacts sufficiently to remove requirement for preparation of individual Species impact statements for each proposed development
- Such a comprehensive program (aimed at achieving, improving or maintaining biodiversity values outcomes) would involve include compensatory plantings to offset the removal of vegetation from future development sites in the area. Any vegetation loss from development could be compensated by the restoration of functional wildlife corridors on the abutting Porters Creek Wetland, in accordance with the no net loss vegetation provisions of and Chapter 13 – Interim Conservation Areas. Compensatory plantings would have to include indigenous vegetation and preferably be capable of screening future development of visually prominent areas. Figure 3 identifies an area which may be suitable for compensatory plantings.
- Agreement must be reached with Council regarding the vegetation type, location and management of the corridor.

Note: This is a Council initiative and is not associated with any NSW State conservation program.

- If the concurrence described in the previous dot point cannot be achieved, recognise that any future development proposal in the area is highly likely to trigger a 'significant' [Class 1(b)] impact (as defined by Section 5A of the *Environmental Planning and Assessment Act, 1979*) and investigate whether all future development will be required to be supported by an Species Impact Statements (SIS). If so, specify the requirement for all future development applications to be accompanied by an SIS
- Require referral to the Commonwealth Department of Environment and Heritage in relation to any relevant requirements of the *Environmental Protection and Biodiversity Conservation Act, 1999*
- Require area design to be supported by assessments in accordance with:
 - Council's Flora and Fauna Guidelines
 - Threatened Species Conservation Act, 1995
 - Chapter 14 – Tree Management
 - Chapter 13 – Interim Conservation Areas for Wyong Shire
 - Squirrel Glider Conservation Management Plan: Wyong Shire (Smith, November 2002)
- Require the overall development design of the area to retain significant stands of vegetation, strategically located, to minimise visual impacts (*refer Section 3.2.9*) as well as reduce potential for soil erosion. It must be demonstrated that future development will be adequately screened by natural vegetation retention from important view points, including those identified on *Figure 5*.
- Require restoration work of wildlife corridors within Porters Creek Wetland, to facilitate performance of its ecological role
- Require a vegetation management plan (VMP), prepared by a suitably qualified and experienced person, to accompany any subdivision application
- A VMP must comply with Chapter 14 – Tree Management, and provide strategies for the long-term effective monitoring and management of vegetation, including how this will be funded
- Require that subdivision applications be accompanied by a landscape plan that complies with *Category 3 of Council's Landscape Policy* and demonstrates that potential visual impacts are resolvable. The landscape plan must indicate:
 - The extent of vegetation retention
 - The location, form and types of species to be planted. Only indigenous species must be used as they have low nutrient and water requirements
 - The areas to be landscaped, paved areas, retaining walls and types of fencing
 - Continuity of existing tree canopy to complement existing environmental and landscape qualities
 - Minimal opportunity for weed invasion
- Include reference to Wyong Development Control Plan 2005, Chapter 14, Section 6, Penalties relating to unauthorised injury, removal or destruction of trees or clearing of native vegetation on Private and Public Land under the provisions of the *Environmental Planning and Assessment Act, 1979*

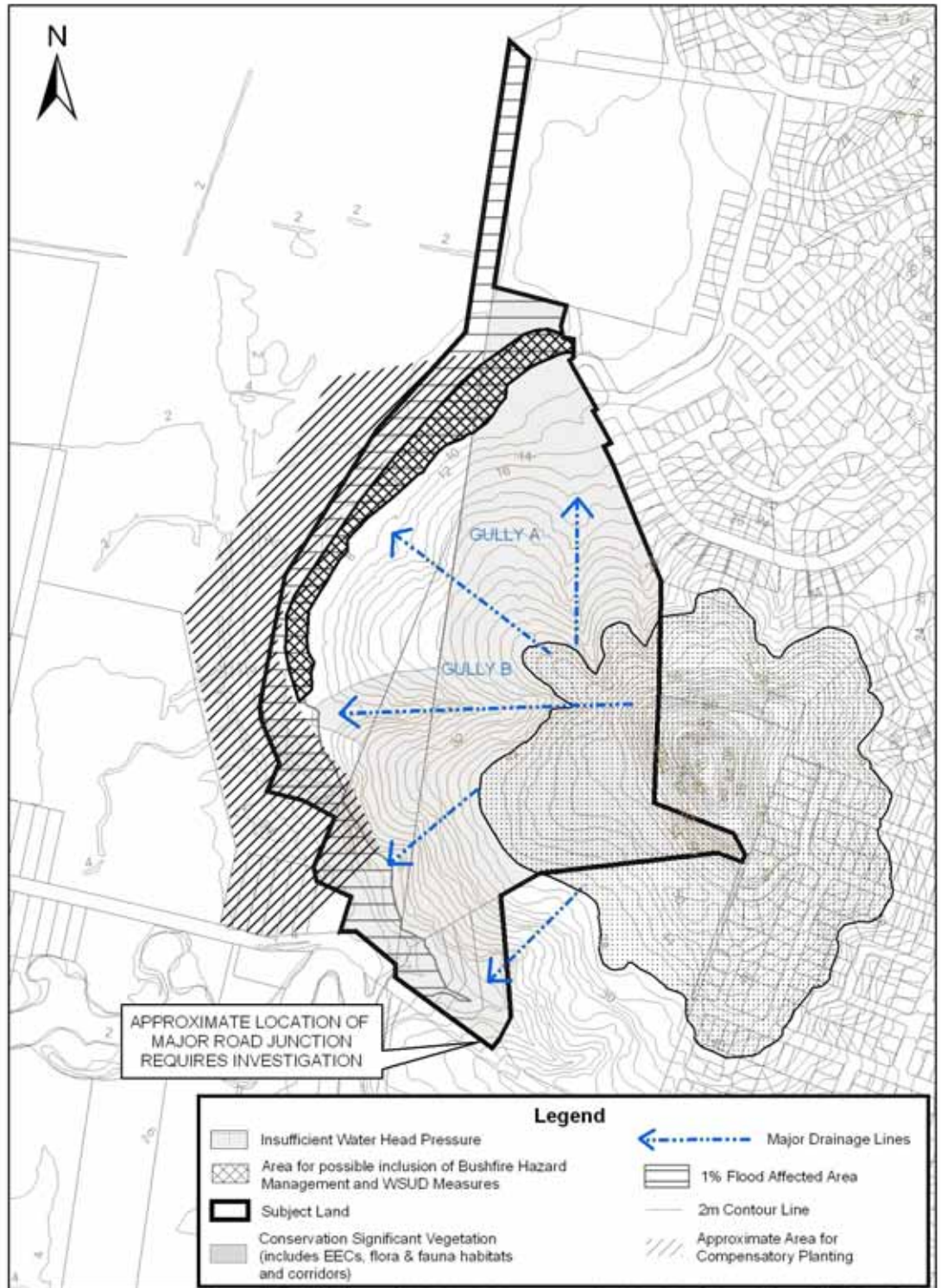


Figure 3 Site Constraints and Opportunities

3.2.3 Drainage, Stormwater and Water Cycle Management

The land to which this Chapter applies is upstream of and drains to Porters Creek and Wyong River, which are part of a major wetland system for Wyong Shire, which feeds into the Tuggerah Lakes System.

Development within the Porters Creek and Tuggerah Lakes catchments has the potential to adversely affect the health of these systems and the water supply.

Some of the land that is zoned for residential purposes is within 40 metres of Porters Creek and includes steep terrain with slopes ranging 9% to 22%. Appropriate design measures need to be incorporated to ensure that development is sympathetic to this sensitive location and does not promote degradation of Porters Creek wetland health. Consequently, the incorporation of Water Sensitive Urban Design (WSUD) measures will be expected.

Figure 3 identifies known major drainage lines and slopes and an area which may be suitable for WSUD measures.

OBJECTIVE

- To manage drainage and stormwater within the area to minimise any opportunity for change in:
 - total runoff, quantity and rate
 - the velocity of runoff
 - nutrient and sediment loads along individual drainage lines
 - overall hydrology
 - weed species transfer
 - Porters Creek wetland healththat may affect adjoining or downstream vegetation and functional systems, without compromising biodiversity values, landscape and scenic qualities of the area.

REQUIREMENTS

A Masterplan must identify appropriate strategies and/or requirements, supported by a stormwater management plan and integrated water cycle management plan for the area, prepared by a suitably qualified and experienced professional. Such strategies / requirements must:

- Identify the location of existing drainage lines and features
- Be based on satisfactory water quantity and quality modelling
- Incorporate Water Sensitive Urban Design measures, guided by draft Chapter 97 (WSUD), to approximate pre-development or natural flow volumes, nutrient and sediment loads, including:
 - A demonstrated effective integrated drainage design layout to control, recycle, harvest and/or treat stormwater during and following construction. Such a layout should facilitate 'treatment train' approaches including measures of appropriately sized detention structures and rainwater tanks to enable sufficient detention of rainwater to mitigate the impact of increased runoff, and enable harvesting and/or re-use for garden watering and other non-potable purposes on-site
 - Landscaping that includes plants indigenous to the locality to minimise the need for on-going management (i.e., watering, fertilisers, herbicides and the like). Landscaping must seek to capture runoff through the use of catch

drains, porous paving, depressions, grass swales, rock channels, ridges, reed beds, and the like

- Measures which effectively manage any potential increased drainage flows on-site to prevent increased off-site flows to avoid suspended solids and nutrients leaving the site to minimise impacts on water quality. In this regard, any stormwater detention measures should be located as close to the source as possible
- Soil conservation techniques, including erosion and sediment control plans, prepared and carried out in accordance with Council's Erosion and Sediment Control Policy
- Drainage design that incorporates permanent pre-treatment water quality devices that remove litter and coarse bedload sediments on all major drainage lines. Such design must include a monitoring, maintenance and management plan for the drainage system
- Demonstration that any proposed measures will not adversely impact on the health, water storage capacity and functionality of the Porter's Creek Wetland System
- Flow retarding and other WSUD measures to be integrated throughout the area at appropriate locations
- Preparing a Porter Creek Integrated Water Cycle Management Strategy that integrates with the Porters Creek Stormwater Harvesting Strategy. Council's Manager Natural Resources must be consulted in relation to this matter
- Demonstration that any measure will not have an unacceptable visual impact (*refer to Section 3.2.9*)
- Require a Part 3A Permit under the *Rivers and Foreshores Improvement Act 1948*, if development works are within 40 metres of a watercourse
- Require weed invasion control measures to prevent transfer and invasion of weed species to the Porters Creek Wetland
- If required, meet the requirements of the Joint Water Authority's criteria for potable water use for supply (ANZECC Guidelines / NHMRC) or achieve the same water quality in Porters Creek that currently exists. This may be particularly relevant where runoff from the northern half of the area flows into the temporary weir on Porters Creek. Where stormwater is to be discharged downstream of this weir, water quantity and quality control measures must meet the requirements of draft Chapter 97 (WSUD) and integrate with the Porters Creek Stormwater Harvesting Strategy.

3.2.4 Land Stability Management

Patonga Claystone soils occur on the land. These soils are highly erodible and contain large sandstone boulders. The land slopes down to the west and a deeply incised gully has formed on this west facing slope.

OBJECTIVE

To avoid potential erosion of unstable soils, movement of any large sandstone boulders and/or potential landslip through appropriate development design, construction techniques, mitigation and management techniques, while also protecting the biodiversity values, landscape and scenic qualities of the area.

REQUIREMENTS

A masterplan must identify appropriate strategies and/or requirements, supported by a satisfactory geotechnical investigation and report, prepared by a suitably qualified and experienced engineering geologist and/or geotechnical engineer, that includes consideration of the potential effects of heavy rainfall, disturbance in medium to high hazard zones, and vegetation clearing on slopes. Such strategies and/or requirements must:

- Indicate the location of medium and high risk areas

- Identify appropriate siting and design of buildings, structures and other works to minimise cut and fill (and avoid where possible) particularly on areas of the site that have medium to high risk of slope instability and/or dispersive soils by utilising design features such as drop edge beams and split levels. The visual impact of any cut and fill must also be considered and addressed (Refer Section 3.2.9 - Visual Significance)
- Minimise the need for site excavation for road and housing construction to minimise potential for landslip, soil erosion and need for visually prominent retaining walls
- Stage development and construction works to minimise the area of the land subject to disturbance at any one point in time
- Locate development away from steep gully areas with an appropriate buffer and manage and/or rehabilitate such steep areas by planting vegetation indigenous to the area
- Require all development and/or construction works are carried out in accordance with Council's Erosion and Sediment Control Policy
- Require geotechnical investigation and reporting, particularly in medium and high hazard areas and on steep slopes, to accompany development applications. Such investigations and reporting must be carried out by a suitably qualified and experienced engineering geologist and/or geotechnical engineer and include mitigation and management measures appropriate for the conditions on the land

3.2.5 Flood Affected Areas

Portions of the land are identified as affected by the one percent AEP flood event.

OBJECTIVE

- To ensure the continued functionality of the floodplain and to protect existing and future residences and infrastructure from damage resulting from flood events

REQUIREMENTS

A Masterplan must identify appropriate strategies and/or requirements, supported by a flood study, prepared by a suitably qualified and experienced person. Such strategies and/or requirements must ensure that no development occurs in flood affected areas unless it can be demonstrated that:

- Development is not subject to inundation within the flood affected area
- The capacity of the floodplain is not reduced by development to the extent that it will cause flooding on or off site
- There is adequate access and egress for all future development that is not affected by flood
- Other functions of the flood plain, including soil structure and vegetation cover are not impacted

3.2.6 Aboriginal Heritage

The land may contain items of Aboriginal cultural heritage or archaeological significance.

OBJECTIVE

- To identify and conserve any sites and/or objects of Aboriginal cultural heritage or archaeological significance

REQUIREMENTS

The Masterplan must identify appropriate strategies and/or requirements to adequately protect any Aboriginal sites and/or objects, supported by an Aboriginal cultural heritage and/or archaeological study and report, prepared by a suitably qualified and experienced person.

Such strategies and/or requirements must:

- Identify any areas that have Aboriginal sites or objects
- Include appropriate measures to protect any identified sites or objects
- Include appropriate triggers for assessment of development applications on individual sites in any areas that have or are likely to have aboriginal sites or objects, by appropriately qualified and experienced persons
- Include appropriate investigation techniques, including excavating test pits
- Be based on agreed outcomes from consultation with the Darkinjung Aboriginal Land Council

3.2.7 European Heritage

The land may contain sites or items of European cultural heritage or archaeological significance.

OBJECTIVE

- To identify and conserve any sites and/or items of European cultural heritage or archaeological significance

REQUIREMENTS

The Masterplan must identify appropriate strategies and/or requirements to adequately protect any European heritage sites, areas and/or items, supported by a cultural heritage and/or archaeological study and report, prepared in accordance with *Chapter 76*, by a suitably qualified and experienced person.

Such strategies and/or requirements must:

- Identify any areas that have European cultural heritage sites, areas or items
- Include appropriate measures to protect any identified sites, areas and/or items
- Include appropriate triggers for assessment of development applications on individual sites in any areas that have or are likely to have European cultural heritage sites or objects, by appropriately qualified and experienced persons

3.2.8 Bushfire Management

The land and the surrounding areas are classified as bushfire prone. Appropriate planning, mitigation and management measures will need to be put in place.

OBJECTIVE

- To provide adequate bushfire protection to buildings and occupants, without unreasonably compromising biodiversity values, landscape and scenic qualities of the area

REQUIREMENTS

A masterplan must identify appropriate strategies and/or requirements, supported by a bushfire hazard assessment, mitigation and management plan, prepared by a suitably qualified and experienced person.

Such strategies and/or requirements must:

- Comply with the contents of the document *Planning for Bushfire Protection, 2006, NSW Rural Fire Service*
- Address the potential conflict from the provision of Asset Protection Zones (APZs) in areas where vegetation must be retained to maintain the current biodiversity, landscape and scenic quality of the area
- Specify how bushfire hazard will be adequately mitigated through the design, and placement of buildings to minimise vegetation clearance or modification
- Identify development design that incorporates adequate defensible spaces (*i.e.*, *Asset Protection Zones*) to protect human life, property and valued public assets from damage by bushfire. All APZs must be generally contained on the land tenure it is to protect (*i.e.*, public land must not be used for providing APZs to protect private development and private land is not to be utilised for providing APZs for protection of public assets) unless mutual benefit can be demonstrated
- Require retention of trees in locations where they will trap embers and reduce wind velocity
- Require modification and management of the understorey to the degree necessary to minimise bushfire risk, but without unreasonably compromising current biodiversity values, landscape and scenic qualities of the area
- Require identification of development designs and construction standards that minimise potential bushfire risk within the site, as well as surrounding areas

Note: Australian Standard AS3959 provides guidance on construction of buildings in bushfire prone areas.

- Require road reserves, dwelling setbacks, service infrastructure, perimeter roads / tracks and measures to minimise ground fuel hazard and adequately separate it from tree canopy to be included in APZs.

Note: Minimising ground fuel hazard involves reducing the amount of vegetation in a forest or woodland understorey to levels that will minimise opportunity for the canopy to catch fire. It does not mean removing all vegetation, of which some can remain to provide for amenity, screening, land stability, etc.

- Identify and ensure adequate water supplies to provide for fire fighting as well as domestic supply
- Identify and ensure adequate access and egress arrangements to provide for fire fighting and evacuation (if required as a last resort)
- Require any development application to demonstrate how the proposed development complies with an approved bushfire hazard management plan
- Be based on the outcomes of consultation with the NSW Rural Fire Service during the preparation of a masterplan for the site

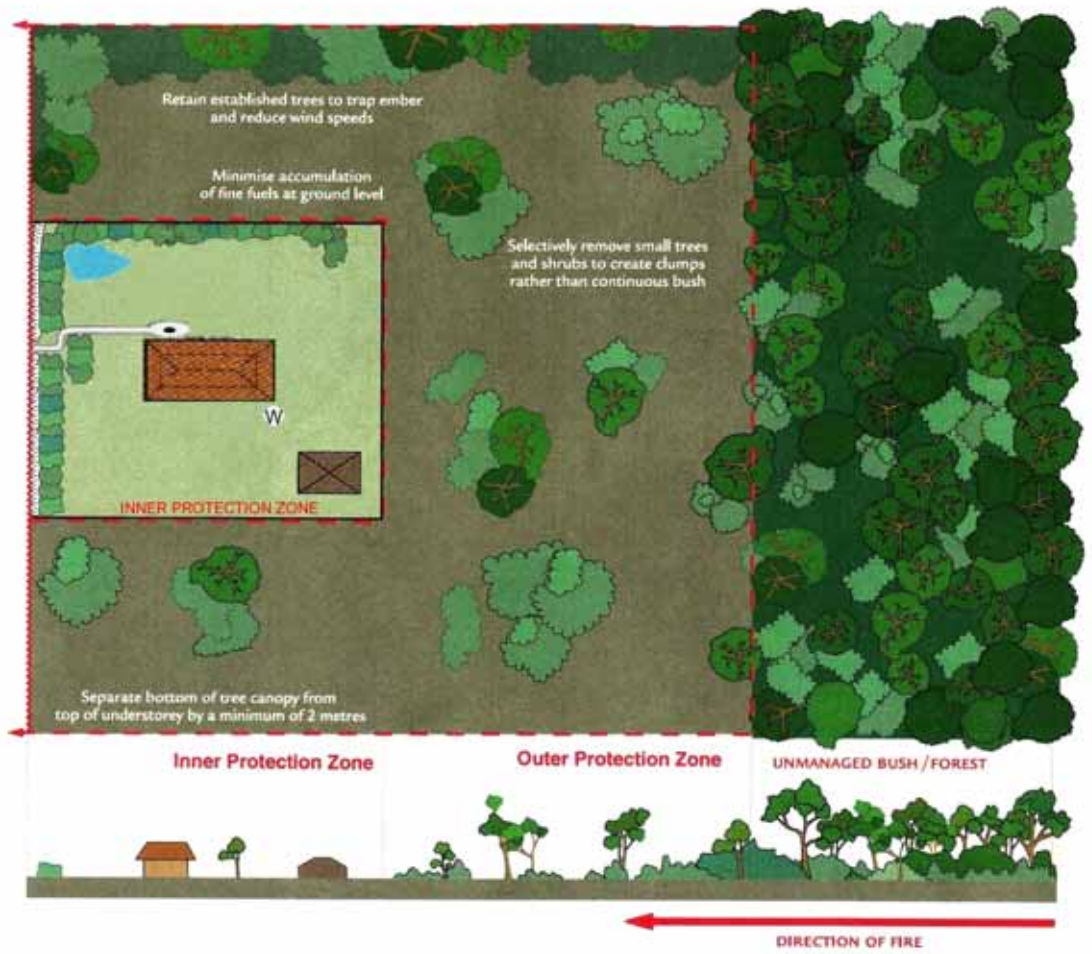


Figure 4 Asset Protection Zone Components

3.2.9 Visual Significance

The land to which this Chapter applies is heavily vegetated and/or visually prominent from a number of important viewpoints.

The visual prominence of the vegetated hillfaces and skyline is considered to make a significant contribution to the character of the Wyong landscape.

OBJECTIVES

- To identify and document the visual significance of the area
- To protect the scenic quality of the area and ensure development will be unobtrusive when viewed from important viewpoints in Wyong Shire
- To enhance the bushland suburb vision for development of the area
- To identify and provide natural reserves and open space for amenity and biodiversity

REQUIREMENTS

A masterplan must identify visually sensitive areas, appropriate strategies and/or requirements, supported by a landscape and visual impact assessment, prepared by a suitably qualified and experienced person. Landscape architects are arguably the best qualified to carry out landscape and visual impact assessments.

An acceptable landscape and scenic analysis methodology includes:

- Identify Landscape Setting Units based on criteria of:
 - Naturalness
 - Built form and identity
 - Landform – diversity and contrast
 - Vegetation – diversity and contrast
 and classify into high, medium or low rating units
- Identify, important viewing points, significant features and ridgelines, including those indicated in *Figure 5*.
- Determine visual accessibility and classify into high, medium or low viewing levels
- Establish scenic management zones from overlaying landscape setting unit ratings and visual accessibility levels to derive the scenic sensitivity significance of various areas on the land to which this Chapter applies
- Establish a range of objectives and strategies for each scenic management zone to set the parameters and limits of change

Other methodologies may be used, but must be approved by Council.

The landscape and visual impact assessment study must:

- identify and consider the impact of development on the land from all important viewpoints
- Identify and specify locations on the land for residential development that are not visually prominent
- Consider various development scenarios (including the 'no development' scenario) for the hillsface slopes and skyline of the area to protect the visual quality and vegetated character of the area

- Consider and specify planting, retention and protection of existing vegetation on the hillsface slopes and skyline in strategic locations to maintain the visual quality and vegetated character of the area, to avoid viewing roads, buildings, building walls, retaining structures and other visually obtrusive development features from the street and important local, mid-ground and distant viewpoints in Wyong Shire
- Discourage features such as fencing and service areas (eg, areas for drying clothes, sheds, barbeques, swimming pools, and the like) in 'front' gardens, so as not to be visible from the street, local, mid-ground or distant viewpoints, to maintain the bushland suburb character, visual values of the area and an attractive streetscape. Alternative shielding strategies must be allowed for in topographically constrained areas
- Identify and nominate appropriate:
 - Requirements for building heights and bulk (refer *Section 3.2.13*)
 - Requirements for colour and texture treatments to building exteriors (refer *Section 3.2.13*)
 - Requirements for maximum area of disturbance on lots (refer *Section 3.2.10*)

to mitigate visual impact

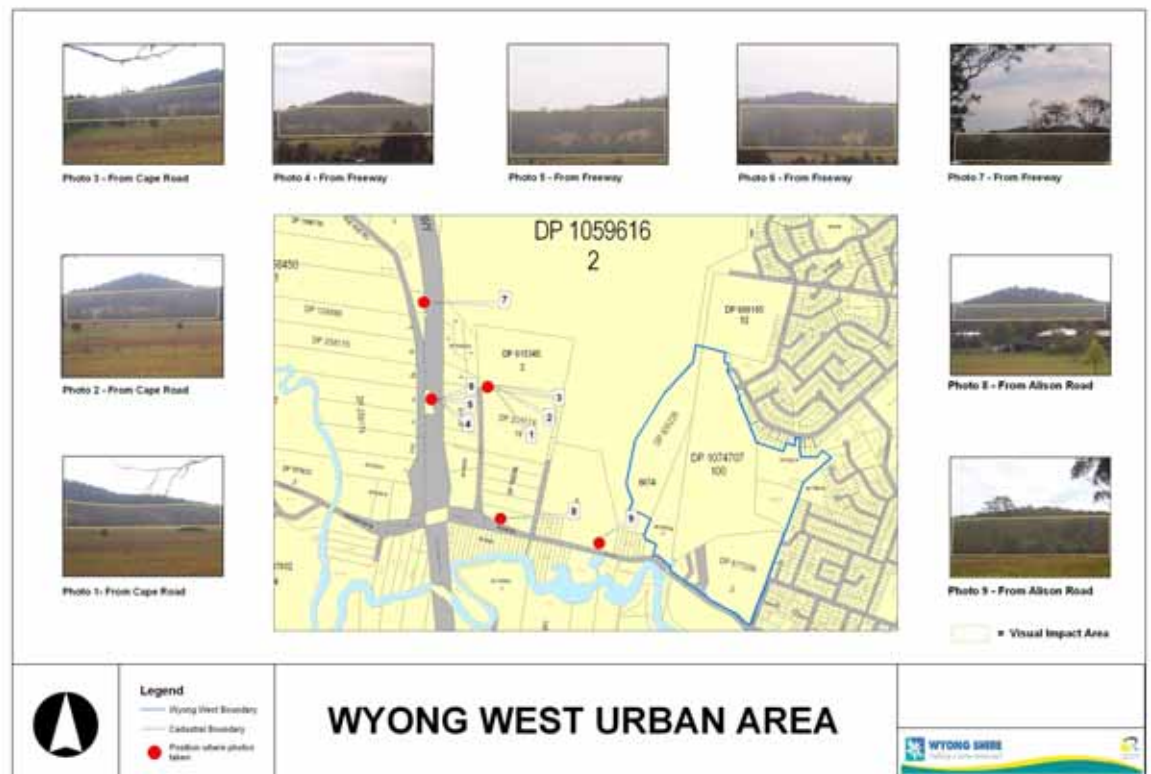


Figure 5 Known Important Viewpoints

3.2.10 Subdivision Design

Conventional subdivision designs on steep slopes, featuring small rectangular lots, visually prominent retaining walls and battered slopes for roads, often result in visually prominent layouts. Due to the steep topography of the land to which this Chapter applies, it is considered that conventional subdivision design is inappropriate.

Community title or conservation design subdivision incorporate visually or environmentally constrained areas into public spaces with pockets of development being surrounded by these environmental or visually sensitive areas. These types of subdivision would be more appropriate for the land to which this Chapter applies.

Design should also provide opportunities for residents to enjoy natural areas of open space.

OBJECTIVES

- To ensure that the subdivision and open space design is sympathetic to the topography, scenic qualities and environmental attributes of the area
- To provide high level residential amenity
- To provide linkages within the area, to surrounding areas and community facilities
- To retain a visually attractive area when viewed from important viewpoints
- To provide for safe and healthy communities

REQUIREMENTS

A masterplan must identify appropriate strategies and/or requirements that:

- Ensure the subdivision layout respects the prominent location and visual significance of the area from important viewpoints in Wyong Shire by incorporating community title or conservation type subdivision designs
- Ensure that development is staged appropriately to minimise the extent of disturbance and facilitate remediation
- Ensure subdivision layout maximises opportunities for future development to be orientated to optimise solar access in winter and cooling breezes in summer

Note: Council's Chapter 100 – Quality Housing and/or State Government's Solar Access for Lots – Guidelines for Residential Subdivision in NSW, contain useful guidelines for passive energy efficient design.

- Ensure subdivision layouts are designed generally in accordance with the principles contained within Council's *Chapter 66 - Subdivision* and *Chapter 100 - Quality Housing, Healthy-by Design – Heart Foundation*, and "Safer- by-Design – NSW Policy 2001", unless modified by this Chapter
- Ensure subdivision layouts respect the natural topography and attributes of the area by minimising the need for:
 - Site excavation for roads and housing construction
 - Features such as road cuttings and retaining walls

which could cause adverse visual impact (refer *Section 3.2.9*) or land instability (refer *Section 3.2.4*)

- Encourage the provision of larger irregular shaped lots on steeper slopes in accordance with Council's *Chapter No 66* (particularly Table 2) to provide the opportunity for:
 - Retaining significant stands of vegetation in strategic locations to mitigate visual intrusion in the landscape and maintain environmental values
 - Mitigating visual impact caused by the usual straight lines of typical rectangle shaped lots (Refer Figure 6)
- Identify, on a readable scale map (eg, 1:1000) attached to the masterplan, a maximum area of disturbance (eg, 400 sqm or 50% of the area of each lot, whichever is less) in which development, such as buildings, bushfire defendable spaces (APZs), landscaping and construction activity can occur. These would normally only be building footprints, building envelopes, removing vegetation within 3 metres of buildings and driveways (Refer *Figure 7*)
- Specify no disturbance to vegetation outside the maximum area of disturbance (referred to in the previous dot point) for each allotment without the approval of Council (except for a driveway (of a specified width – eg, maximum 3 metres wide) between the street and the front of the building or for bushfire hazard management purposes (Refer *Figure 7*)
- Provide for adequate, useable and accessible open space or reserve areas (refer *Section 3.2.11*)

- Provide for community facilities (such as post boxes, telephones, and the like) at locations within four hundred metres to houses and open space areas



Figure 6

Large Irregular Shaped Lots Permit Vegetation Retention, Various Building Forms and Limit Need for Cut and Fill

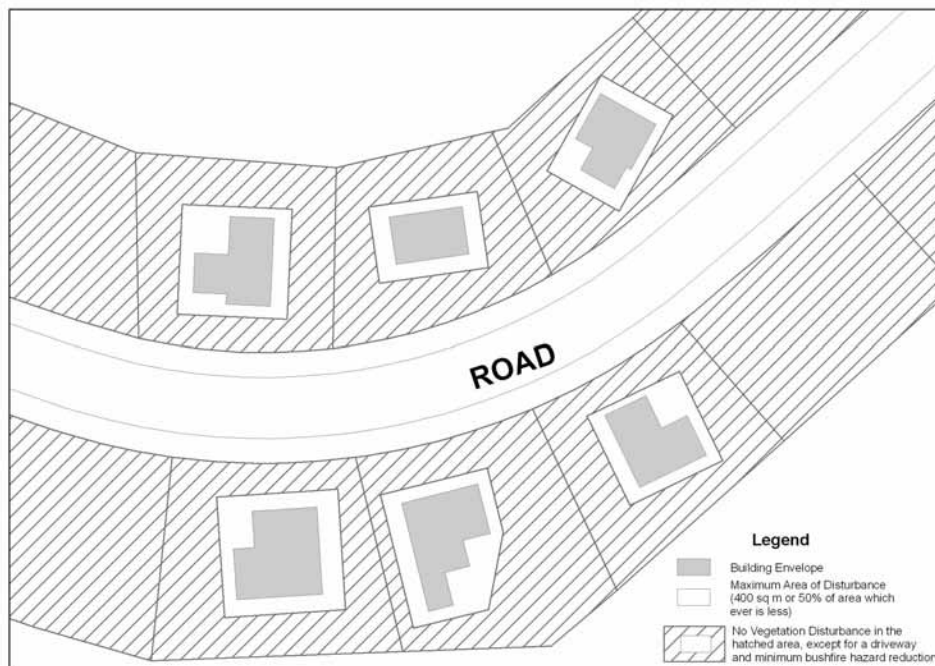


Figure 7

Identifying Maximum Areas of Disturbance and No Disturbance Areas

3.2.11 Open Spaces and Reserves

Open spaces and reserves can be:

- Recreational spaces
- Areas where the vegetation is retained to screen development in visually prominent locations

- Areas which provide function, such as for protecting biodiversity, providing bushfire protection or reducing summer heat to surrounding residences

The elevation and topography of the site requires special consideration to be given to the location, function and provision of open space and reserve areas, particularly at the initial design stages of subdivision and development.

The steep topography and terrain of the site will constrain access to open space areas and parks, for some potential users, particularly the elderly and those with disabilities. Consequently, careful consideration will need to be given to locating open space areas so that as many as possible are accessible by these users.

Subdivision and development design will have to consider the relationship of open spaces and reserves to surrounding areas and provide opportunities for passive surveillance. Such areas should be easily identifiable as public spaces by persons entering and/or moving around the West Wyong area.

OBJECTIVES

To ensure that open space areas:

- Are appropriately located to provide easy access for all potential users and easily identified
- Provide for protection of important vegetation, visually sensitive areas, property and the safety and health of residents and visitors

REQUIREMENTS

A masterplan must identify appropriate strategies and/or requirements that:

- Specify that open spaces comply with the Wyong Open Space Principles Plan 2005
- Require that local parks comply with Wyong Council's Local Parks Strategy
- Require that open spaces comply with Healthy-by-Design principles, including:
 - Ample open space suitably located and designed
 - Provide secure trip and cycle facilities
 - Ensure walking and cycle routes within open space areas are connected to the broader network
- Create 'pleasant places' for people to relax, sit, meet and for flora and fauna protection
- Require adequate shared access (footpath and cycleway) to open space areas by locating them in relatively flat areas and/or grading pathways/tracks
- Require open space areas to be located so that most residents are within reasonable walking distance (i.e., 400 metres) of an open space area
- Require paths within open space areas to connect to major destination elements within the open space area
- Require the creation of connective vegetative corridors along path/cycle ways which link open space and/or residential nodes to assist with providing, amenity, screening and land stability
- Require open space areas to be located and designed in such a way to permit passive surveillance from people going about their everyday activities to provide for the safety and health of users

Note: The last two dot points have potential for conflict. However, through careful planning and design they can mutually achieve their respective objectives to provide for screening, amenity, land stability while also providing for passive surveillance and safety.

- Require the retention or planting of suitable shade trees to sitting and play areas
- Require age appropriate play equipment with adequate safety fencing (i.e., play equipment provided at a density and level commensurate with the age profile of the people who will be using it)
- Require open space design to incorporate visual screening if viewed from identified important viewpoints and visual impact assessment identifies an unacceptable impact without screening

Note: The creation of open space areas often requires as much thought as to potential visual impact and mitigation measures as other forms of development. This is especially the case where the landscape is homogenous.

- Are based on agreed outcomes from consultation with Council's Landscape Architect (Open Space and Recreation Department). Council's Landscape Policy requires applicants to plan and design open space in consultation with Council throughout the design stage of the development

3.2.12 Water Supply and Pressure

Some upper-portions of the site (i.e., those at and above the 40 metre contour) currently have insufficient water pressure for domestic use and/or bushfire fighting. *Figure 3* indicates the approximate boundaries of the area which has insufficient water pressure.

OBJECTIVES

- To ensure that the amenity and safety of future residents is not compromised by insufficient water and pressure

REQUIREMENTS

The Masterplan must identify appropriate strategies and/or requirements that:

- Demonstrate that sufficient water supply at an adequate pressure will be available to future residences for domestic use and bushfire fighting, particularly in areas identified as having insufficient water pressure (i.e. those at and above the 40 metre contour) as shown in *Figure 3*

Generally in this situation Council will not service above RL40 and will not accept a privately owned water supply system.

- Are based on agreed outcomes from consultation with Council's Investigation Engineer

Note: Councils DSP Wyong District (2001) for the area provides information for providing adequate water supply and pressure.

3.2.13 Building

Given the visual prominence of the area, a masterplan must include requirements for building that will result in development of high quality urban design that incorporates healthy-by-design, safety-by-design, energy efficiency, water sensitive urban design principles and textures and colours that blend with the surrounding landscape, so as to be sympathetic to the site's slope constraints, biodiversity, landscape and scenic values. The topography offers opportunities for various forms of building construction to be used.

OBJECTIVES

- To achieve high quality urban design which is healthy, safe, energy efficient, visually unobtrusive, incorporates water sensitive urban design principles, utilises various forms of building design, construction techniques, materials, and colours which are sympathetic with the area's constraints and landscape values

REQUIREMENTS

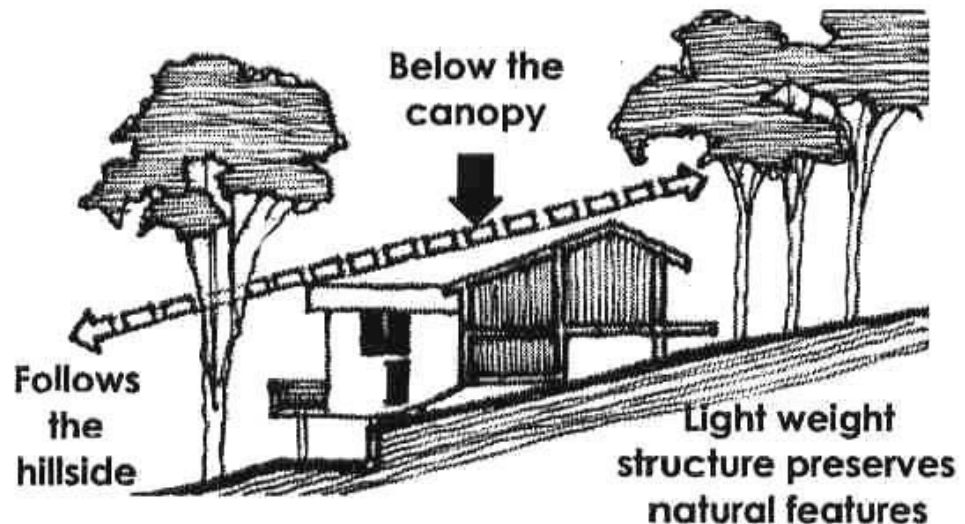
A masterplan must identify appropriate strategies and/or requirements that:

Building Siting and Design

- Identify building envelopes in which all development and construction activity occurs. Such envelopes must be located where they have minimal impact on or be impacted by slope stability, acid sulphate soils, native vegetation, drainage lines and easements, flood affected areas and views from important viewpoints to the land to which this Chapter applies (refer *Sections 3.2.2, 3.2.17, 3.2.3, 3.2.4, 3.2.5, 3.2.10* and *Figure 5*)
- Require all buildings and construction activity to contained solely within nominated disturbance envelopes (refer *Section 3.2.10, Subdivision Design*)
- Require buildings to be designed to sit below the bushland canopy (refer *Figure 8*)
- Require all buildings to be located in areas where adequate water supply and pressure and services can be provided and inhabitants will not be unreasonably affected by noise (refer *Sections 3.2.12, 3.2.16, & 3.2.15,*)
- Require buildings to be sited and designed to provide passive surveillance of public areas (refer *Sections 3.2.10, & 3.2.11*)
- Require buildings to be sited and designed to assist protection during a bushfire (refer *Section 3.2.8, Bushfire Management*)

Building Scale

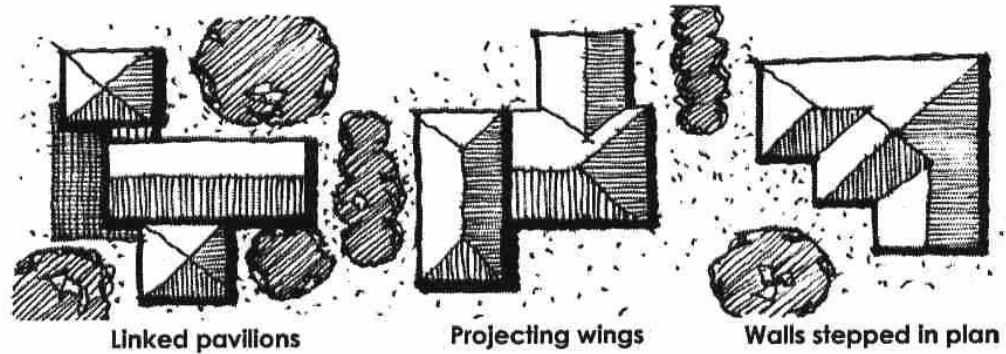
- Limit building height and bulk by specifying an appropriate maximum 2 storey height limit and encourage single storey split level housing designs that 'step-down' the slope below the forest canopy (refer *Figure 8*)



(Source: Gosford City Council DCP 159 – Character)

Figure 8 Dwellings Below the Canopy, Following Contours, to Limit Visual Impact

- Require roofs to be minimised and coloured so as not to be prominent
- Require large buildings to be designed with a series of linked pavilions or wings separated by landscaped courtyards (Refer *Figure 9*)



(Source: Gosford City Council DCP 159 – Character)

(S)

Figure 9

The Use of Pavilions and Wings Minimise Apparent Scale of Buildings

- Require that street frontages are not dominated by garages, steep driveways, high walls or retaining structures
- Discourage front fencing and service areas between the building and the street (refer *Section 3.2.9*)
- Require development applications to address the requirements of Council's *Chapter 100 – Quality Housing*

Building Construction, Materials and Colours

- Specify buildings can use various construction techniques, but for steeper slopes there is a preference for split level designs that follow the slope of the land and/or lightweight construction designs with suspended floors and decks, which are demonstrated defensible in a bushfire (refer *Section 3.2.8, Bushfire Management*)
- Specify that building exteriors (including walls, roofs, under-eave and trim) must be constructed of materials and finished in textures and colours that are non-reflective and blend with the surrounding landscape to adequately mitigate any potential visual impact within the sensitive landscape. The mid to dark tones identified in AS2700 (Colour Standards for General Purposes) 1996 must be nominated

Energy Efficiency

- Ensure all future development is designed and orientated to provide the opportunity for future dwellings to maximise natural lighting, passive ventilation and heating through optimising use of prevailing winds, retention and/or planting of vegetation and orientation to the sun.

Note: Council's Chapter 100 – Quality Housing and SEDA's Solar Access for Lots – Guidelines for Residential Subdivision in NSW, contain useful guidelines for energy efficient design.

Site Topography

- Require development applications to demonstrate how designs retain natural contours
- Require development applications to demonstrate how the visual impact of any necessary cut and fill will be satisfactorily mitigated

3.2.14 Site Landscaping

OBJECTIVES

- To provide landscaping that integrates the development with the surrounding landscape, ensuring the current environmental and visual character and quality is maintained

REQUIREMENTS

A masterplan must identify appropriate strategies and/or requirements that:

- Require landscaping to reinforce the natural character of the locality by planting species that are indigenous to the area, compatible with the soil and climatic conditions of the area, to maximise survival rates and minimise on-going management by future property owners. A list of suitable species, indigenous to the area, must be provided in the masterplan
- Require areas outside disturbance areas to be retained as bushland, except for a driveway between the street and frontage of a building (refer *Section 3.2.10*)
- Allow development in areas outside building envelopes to be permitted in exceptional circumstances (eg, where there are unavoidable site constraints) but only with the permission of Council
- Specify that development not be visually prominent from important viewpoints and that a landscape plan demonstrating appropriate screening must be provided to reduce the visual impact of development (refer *Section 3.2.9*)

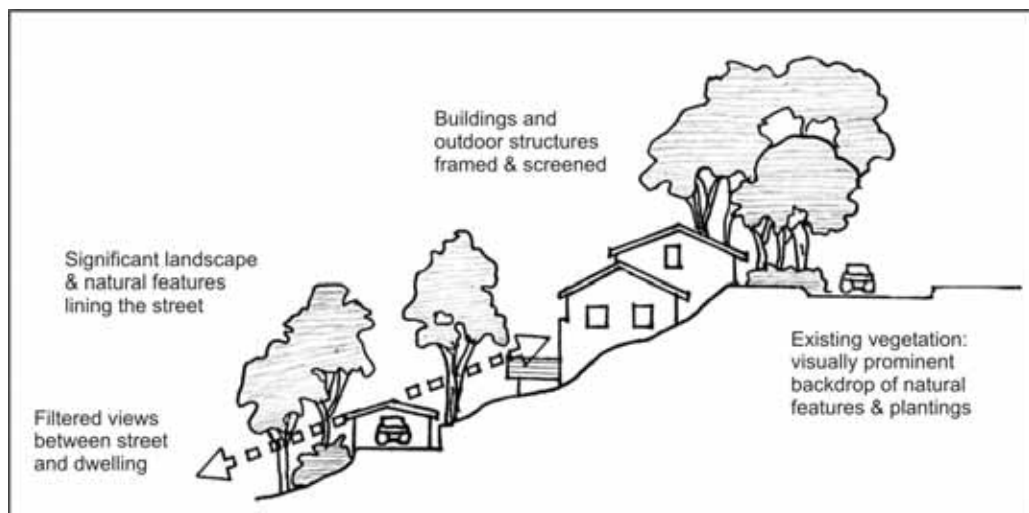


Figure 10 Landscaping and Retained Vegetation can be used to Limit Visual Impact of development

- Require that development will not create conditions that are likely to adversely impact on the long-term viability of retained or planted vegetation (particularly conservation significant communities and habitats) by specifying the need for the long-term viability of the vegetation to be assessed, by a qualified and experienced person, in relation to the likely threats from the proposed development
- Require details of any vegetation to be retained or planted, and the proposed measures to ensure retention and survival over the long-term. These details should ensure that potential future purchasers are aware of:
 - The trees that must be retained on individual lots
 - Any penalties involved in their unlawful removal

to facilitate selection of appropriate site layout and dwelling designs

3.2.15 Noise

The most likely source of noise is traffic travelling along the Sydney to Newcastle F3 Freeway, located approximately 750 metres west of the site, and Alison Rd, adjoining the site to the south.

OBJECTIVES

- To ensure future residents are protected from noise emanating from F3 Freeway or Alison Road that exceeds Leq 55dBA (24 hours)

REQUIREMENTS

A masterplan must identify appropriate strategies and/or requirements supported by a satisfactory noise study and report, prepared by a suitably qualified and experienced acoustic consultant. Such strategies and/or requirements must:

- Require any necessary acoustic control measures to be incorporated into the design of future development to achieve the noise levels specified in WDCP2005, Chapter 100, that do not compromise the integrity of the overall development design or the landscape values of the land to which this Chapter applies
- Require future development applications in areas identified as sensitive to noise to be supported by a satisfactory noise study and report prepared by a suitably qualified and experienced acoustic consultant that demonstrates compliance with the noise levels specified in WDCP2005, Chapter 100

3.2.16 Site Servicing

How the land to which this Chapter applies will be serviced needs to be considered.

OBJECTIVES

- To ensure the land to which this Chapter applies is adequately serviced by water, sewerage, electricity, telephone, garbage collection and emergency services

REQUIREMENTS

The Masterplan must identify appropriate strategies and/or requirements, based on an approved concept servicing plan, that require development applications to demonstrate how they comply with the concept servicing plan or, alternatively, how development proposals will be adequately serviced.

3.2.17 Acid Sulphate Soils

A portion of the land to which this Chapter applies is mapped as having Acid Sulphate Soils.

OBJECTIVES

- To ensure adequate assessment treatment of future development on land identified as having acid sulphate soils

REQUIREMENTS

The Masterplan must identify appropriate strategies and/or requirements, for assessing and treating future development proposals on the portion of land, to which this Chapter applies, which is mapped as having Acid Sulphate Soils. Such strategies and / or requirements must comply with Clause 15 of Council's LEP and Council's Acid Sulphate Soils Assessment Guidelines.

4.0 OTHER MATTERS

4.1 Pre-Development Application Consultation

Landowners and/or applicants are encouraged to consult with Council prior to lodging any masterplan(s) or development application(s) for the site.

Such consultation should be focussed on ensuring compliance with the provisions of this Chapter, and any other relevant documents, including other relevant Chapters and Council Policies, prior to the preparation and lodgement of any masterplan or development application.

4.2 Development Application Requirements

Prior to any development application being lodged, Council and the Minister, administering SEPP 71, must approve a satisfactory masterplan for the site, which is consistent with the provisions of this Chapter.

A construction and environmental management plan must accompany any development application for approval by Council.

4.3 State and Regional Strategies and Policies

Any masterplan must comply with any relevant State and Regional Strategies and Policies, including the results of any studies, plans, etc required by such strategies or policies.

4.4 Referral Arrangements

Any draft masterplan (during its preparation) and future development applications will need to be referred to the following State agencies:

- Rural Fires Board regarding bushfire issues
- Department of Natural Resources regarding drainage and watercourse issues
- Department of Environment and Conservation regarding Species Impact Statement Concurrence issues
- NSW Police
- NSW Health – Northern Sydney and Central Coast
- Ministry of Transport regarding public transport

4.5 Development Contributions

The site is affected by Section 94 Contributions Plan No 1 for the Wyong and Part Rural West District.

This plan will be updated in 2007 to reflect current population projections and infrastructure costs and will require further amendment after completion of a satisfactory masterplan when details of open space, road and other required facilities have been identified.

5.0

DOCUMENTS USED DURING THE PREPARATION OF THIS CHAPTER

There are numerous studies on land use issues in the locality. The preparation of this plan has relied primarily on information from the following documents:

- Bell, S (2002) *Natural Vegetation of the Wyong Local Government Area, Central Coast, NSW*
- Conacher and Travers (2003) *Flora and Fauna Assessment – proposed residential development Part Lot 608 DP 791652, Watanobbi*
- Conacher and Travers (2004) *Flora and Fauna Assessment – Proposed Alison Road Link Road Construction to Part Lot 608 DP 791652 Watanobbi*
- GHD (2005) *Tolmans Hill Local Area Plan – Stages Sixteen to Twenty*
- *Soil Landscape of the Gosford Lake Macquarie 1:100,000 Sheet*. Prepared by Murphy and Tille, 1993
- National Heart Foundation of Australia, Victorian Division (2004) *Healthy by Design: a planners' guide to environments for active living*
- NSW Government (2001) *Safer- by-Design Policy*
- Smith (2002) *Wyong Squirrel Glider Conservation Management Plan*
- Wyong Shire Council (2002) *Wyong Shire Council Residential Development Strategy*
- Wyong Shire Council (2004) *Wyong West Planning Area Review*
- Wyong Shire Council (2004) *Section 94 Contributions Plan No 1 – Wyong/Rural West*
- Wyong Shire Council, *Acid Sulphate Soils Assessment Guidelines*