4 JUSTIFICATION FOR THE PROJECT

4.1 INTRODUCTION

In correspondence dated 21 November 2005, the Department of Planning (DoP) confirmed that it has determined that the proposed subdivision is a 'major project' to which Part 3A of the EP&A Act applies. This chapter provides a justification for the proposed subdivision at the site taking in to consideration the suitability of the site for future residential land use.

4.2 ASSESSMENT OF THE SUITABILITY OF THE SITE FOR THE PROPOSED SUBDIVISION AND FUTURE LAND USE

4.2.1 Zoning

The site is currently zoned 2(a) Residential. Under the Kempsey Local Environmental Plan 1987, the objective of the zone is "to provide areas for low density residential development". Residential subdivision is permissible with consent within the 2(a) zone. The proposed subdivision includes lots ranging in size from 504.6 square metres to 1815 square metres creating the opportunity for future low density residential development, consistent with the objective of the zone.

4.2.2 Planning Strategy

The Kempsey Shire Council *Residential Land Release Strategy* was prepared to satisfy the requirements of the NCREP and seeks to guide future land use decisions in an integrated manner. The site is identified in the 'Residential Supply Register' located in Schedule 2 of the *Kempsey Residential Release Strategy* (1997) as a future release area. The *Kempsey Residential Release Strategy* (1997) predicts that 74.1 hectares of residential land at South West Rocks will be required between 2006 and 2016 to meet housing demand. The project will meet part of the demand for housing in South West Rocks by providing the opportunity for 44 new houses in South West Rocks.

According to the Residential Land Release Strategy there is a sufficient amount of residentially zoned land in South West Rocks where the subject land is located, to accommodate urban expansion beyond the year 2006. A release of some 60-70 hectares would be appropriate to establish a 20 year supply.

ENVIRONMENTAL RESOURCES MANAGEMENT AUSTRALIA

4.2.3 Appropriateness In Relation To Environmental Implications

The proposed subdivision encourages the future growth and development of South West Rocks in a manner that responds to the constraints and opportunities of the site. A number of assessments were undertaken in the preparation of the design to ensure that it is appropriate development for this site. Section 6 of this report outlines the potential implications and subsequent mitigation and management measures which will be implemented.

4.3 PUBLIC INTEREST

The proposal is of public interest because of the environmental, social and economic benefits resulting from the proposed subdivision and the opportunity the proposal poses for future development. It will contribute to the economic and population growth of the local area by creating housing opportunities.

Demographic figures for household type by age indicate the predominance of couples without children ('empty nesters') and lone person households, which is indicative of an aging population. The proposal provides for low density detached dwellings, which would appeal to families and contribute to a more diverse population within South West Rocks.

The construction phase of the development will create employment and spin off expenditure within the local community will be positive socio-economic impact. It is anticipated that the construction workforce will include 15 to 20 people and where possible the local workforce will be used.

5 PLANNING PROVISIONS

5.1 INTRODUCTION

This chapter sets out the existing planning framework that affects the site. In accordance with the requirements of the Director General dated 5 July 2006, this chapter:

- demonstrates consistency of the proposal with the broader planning objectives;
- demonstrates the permissibility of the project and consistency with statutory provisions;
- addresses the nature and extent of variation from specified environmental planning instruments.

5.2 ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979

The Environmental Planning and Assessment Act 1979 (EP&A Act) and the Environmental Planning and Assessment Regulation 2000 have been amended to include Part 3A, which provides a streamlined assessment and approval process for development that is defined as a Major Project. Pursuant to Section 75B of the EP&A Act Part 3A EP&A Act applies "...the carrying out of development that is declared under this section to be a project to which this Part applies:

(a) by a State environmental planning policy..."

The development is declared a major project under State Environmental Planning Policy (Major Projects) and this is outlined in section 5.3 of this report.

In a letter dated 21 November 2005, the DoP confirmed that the proposal is a 'Major Project' to which Part 3A of the EP&A Act applies. The Minister for Planning is the consent authority for the project.

This EA report considers the likely impact of the project on the environment and has been prepared in accordance with Clause 75(F) of the EP&A Act.

Under *Clause* 75(R) of the EP&A Act environmental planning instruments (EPIs) (other than State Environmental Planning Policies) do not apply to a 'Major Project'. A discussion of the applicable State Environmental Planning Policies (SEPPs) to the proposed development follows.

Pursuant to *Clause 75U* of the EP&A Act authorisation for a Part 3A approved project is not required under Part 4, section 139 or Division 8 of Part 6 of the <u>Heritage Act 1977</u>, section 87 or a consent under section 90 of the <u>National</u> <u>Parks and Wildlife Act 1974</u>, section 12 of the <u>Native Vegetation Act 2003</u>, Part 3A of the <u>Rivers and Foreshores Improvement Act 1948</u>, section 100B of the <u>Rural Fires Act 1997</u> and section 89, section 90 or section 91 of the <u>Water Management Act 2000</u>.

5.3 STATE ENVIRONMENTAL PLANNING POLICIES

5.3.1 State Environmental Planning Policy (Major Projects)

State Environmental Planning Policy Major Projects (SEPP MP) 2005 defines certain developments that are major projects under Part 3A of the EP&A Act and lists State significant sites and the development controls that affect the sites in *Schedule 2*.

The proposed subdivision is regarded as a 'Major Project' as *Schedule 2 Clause* 1(*i*) includes "*subdivision of land in a residential zone into more than 25 lots or in a rural/residential zone into more than 5 lots, but in the case of the metropolitan coastal zone only if the land is wholly or partly within a sensitive coastal location*". The proposal is a staged subdivision which will create 45 residential lots in the coastal area.

(ii) State Environmental Planning Policy 11 - Traffic Generating Developments (SEPP 11)

The aims, objectives, policies and strategies of this Policy are to ensure that the RTA is made aware of, and is given an opportunity to make representations in respect of, amongst other matters, the subdivision of land into 50 or more allotments (Schedule 2 of SEPP 11). This SEPP is not applicable to the proposal as the proposed subdivision will create less than 50 lots.

(iii) State Environmental Planning Policy 44 – Koala Habitat (SEPP 44)

The policy applies to land in Kempsey local government area and aims to:

"...encourage the proper conservation and management of areas of natural vegetation that provide habitat for koalas, to ensure permanent free-living populations over their present range and to reverse the current trend of population decline:

(a) by requiring the preparation of plans of management before development consent can be granted in relation to areas of core koala habitat, and

(b) by encouraging the identification of areas of core koala habitat, and

(c) by encouraging the inclusion of areas of core koala habitat in environment protection zones"

A koala habitat assessment as defined within SEPP 44 was undertaken to determine if the site would be classed as core Koala habitat. Although Koala feed trees were identified within the site no scats or other indirect evidence of koalas were found at the site. It is therefore not considered a core koala habitat as defined under SEPP44.

For further information the refer to the *South West Rocks Rosarii: Ecological Assessment, November 2006, ERM* submitted as part of the supporting documentation.

(iv) State Environmental Planning Policy 55 – Remediation of Land (SEPP 55)

This policy introduces state-wide planning controls for the remediation of contaminated land. It states that development must not occur on contaminated land and if the land is unsuitable, remediation shall take place.

Previous activities on the subject site indicate that the site would not be contaminated. The subject site is used for rural residential purposes. It accommodates a single dwelling with most of the site being unused or grazed by a horse. No industry or intensive agricultural activities have been undertaken on the site.

(v) State Environmental Planning Policy 71 - Coastal Protection (SEPP 71)

This policy aims to further the implementation of the Government's coastal policy to protect and manage the natural, cultural, recreational and economic attributes of the New South Wales coast. The Policy came into force in November 2002 and applies to land within the coastal zone. The subject site falls within the coastal zone, and therefore the provisions of SEPP 71 apply.

Consistency with SEPP 71 is set out in the *Table 5.1* of this report.

Part/Clause/ (subclause)	Consideration	Comments
Part 2 Clause 8		
a)	The aims of this policy set out in clause 2.	
MENT AUSTRALI	(a) To protect and manage the natural, cultural, recreational and economic attributes of the New South Wales coast.	The proposed subdivision has been designed to address the features of the site and surrounding environment as set out in section 6 of this report. Aboriginal heritage, ecological, arboricultural, soil investigations and surface water investigations were completed to ensure that the cultural and natural attributes of the site are managed.
		 The site is well located to close to: sporting facilities, including a golf course and bowling club, public pool, squash and tennis courts, and 2 hectares of sports fields near the South West Rocks Country Club; foreshore open space areas, in the form of parks and beachside areas at Front Beach and Horseshoe Cove; a Community Hall and library in the town centre.
		As the proposal will introduce only 44 new households to the township it will not unduly affect the demand on existing recreational facilities.
		The site is approximately 3.5 kilometres from the beach and therefore its development will not affect the ability for the public to enjoy the recreational attributes of the NSW coast. In relation to economics, it is anticipated that the construction workforce will include 15 to 20 people. Local workforce will be used where possible.

Part / Clause / (subclause) number	Consideration	Comments
	(b) To protect and improve existing public access to and along coastal foreshores to the extent that this is	The site is approximately 3.5 kilometres from Front Beach and as such the development would not affect any existing public access to and along the coastal foreshores.
	compatible with the natural attributes of the coastal foreshore.	The existing road network provides access from the proposed subdivision to the coastal foreshore.
	(c) To ensure that new opportunities for public access to and along coastal foreshores are identified and realised to	Refer to above comments.
	the extent that this is compatible with the natural attributes of the coastal foreshore. (d) To protect and preserve Aboriginal cultural heritage, and Aboriginal places, values, customs, beliefs and traditional	Refer to Section 6.5 of this report and South West Rocks: Aboriginal Heritage Assessment, September 2006, prepared by ERM.
	knowledge, and (e) To ensure that the visual amenity of the coast is protected.	The site is not visible from Front Beach. The orientation of lots to ensure dwellings front Gregory Street, retention of trees, provision of space for landscaping and proposed design guidelines, ensure that future development on the site contributes to the visual amenity of Southwest Rocks.
	(f) To protect and preserve beach environments and beach amenity.	As the site is more than three kilometres from the beach the subdivision will not affect the beach environments and amenity.
	(g) To protect and preserve native coastal vegetation.(h) To protect and preserve the marine environment of New South Wales.	The proposed subdivision has been designed to address the features of the surrounding environment as set out in section 6 of this report. N/A

Pî D	Part / Clause / (subclause) number	Consideration	Comments
		 (j) To manage the coastal zone in accordance with the principles of ecologically sustainable development (within the meaning of section 6 (2) of the <i>Protection of the Environment Administration Act</i> 1991) 	 Principles of ecological sustainability are considered in the proposed subdivision by: incorporating energy efficient subdivision design; adopting the water sensitive urban design philosophy; retaining as many existing trees on site as possible; and providing for a dual reticulated system.
		(k) To ensure that the type, bulk, scale and size of development is appropriate for the location and protects and improves the natural scenic quality of the surrounding area.	The proposed subdivision creates a low density development suitable to the existing landscape and subdivision pattern in the immediate area. The proposal limits development to one house on each lot and will provide for design guidelines that ensure future development is appropriate.
		(l) To encourage a strategic approach to coastal management.	The site is zoned as 2(a) Residential. The proposal achieves the objective of the zone which is "to provide areas for low density residential development". The proposal also aims to achieve the strategic direction set out in local and regional planning policies.
(q		Existing public access to and along the coastal foreshore for pedestrians or persons with a disability should be retained and, where possible, public access to and along the coastal foreshore for pedestrians or persons with a disability should be improved	This is not relevant to the proposal as the site is approximately three kilometres from Front Beach.
c)		Opportunities to provide new public access to and along the coastal foreshore for pedestrians or persons with a disability	Refer to above comments.

d) The suitability of development given its The proposal for a subdivision within a residential 2(a) zone and the provisions for future low-density verse, location and design and its development is a suitable development given the existing surrounding developments. elationship with the surrounding area This proposal intends to retain existing trees where possible in order to maintain a bush like setting of the. e) Any detrimental impact that impact that the amenity of development may have on the amenity of the costal foreshore, including any significant overshadowing of the costal foreshore, including any significant overshadowing of the costal foreshore, including any significant sole the costal foreshore, including any significant sole the costal foreshore and any significant sole the costal foreshore including any significant sole the costal foreshore and any significant sole the costal foreshore. f) The scenic qualities of the costal foreshore including any significant sole to the costal foreshore. f) The scenic qualities of the New South interesting will ensure the proposed subdivision will not affect the scenic qualities of the costal foreshore. g) Males costs and means to protect and guidelines and landscaping will ensure the protection and enhancement of the scenic qualities of the conting the fore the costal foreshore. g) Males costs and means to protect and guidelines and landscaping will ensure the protection and enhancement of the scenic qualities of the conting of the <i>Threateneed Special Special Assessment</i> . September 2006, prepared b meaning of that Act), and their holding	Part / Clause / (subclause) number	Consideration	Comments
Any detrimental impact that development may have on the amenity of the coastal foreshore, including any significant overshadowing of the coastal foreshore and any significant loss of views from a public place to the coastal foreshore The scenic qualities of the New South Wales coast, and means to protect and improve these qualities Measures to conserve animals (within the meaning of the <u>Threatened Species</u> <u>Conservation Act 1995</u>) and plants (within the meaning of that Act), and their habitats	d)	The suitability of development given its type, location and design and its relationship with the surrounding area	The proposal for a subdivision within a residential 2(a) zone and the provisions for future low-density residential development is a suitable development given the existing surrounding developments. This proposal intends to retain existing trees where possible in order to maintain a bush like setting of the area.
The scenic qualities of the New South Wales coast, and means to protect and improve these qualities Measures to conserve animals (within the meaning of the <u>Threatened Species</u> <u>Conservation Act 1995</u>) and plants (within the meaning of that Act), and their habitats	(e	Any detrimental impact that development may have on the amenity of the coastal foreshore, including any significant overshadowing of the coastal foreshore and any significant loss of views from a public place to the coastal foreshore	This consideration is not relevant as the site is not located on the coastal foreshore.
Measures to conserve animals (within the meaning of the <u><i>Threatened Species</i></u> <u><i>Conservation Act 1995</i>) and plants (within the meaning of that Act), and their habitats</u>	(J	The scenic qualities of the New South Wales coast, and means to protect and improve these qualities	The location of the site means that the proposed subdivision will not affect the scenic qualities of the coast. Design guidelines and landscaping will ensure the protection and enhancement of the scenic attributes from the proposed site to the coastal foreshore.
	8	Measures to conserve animals (within the meaning of the $\underline{Threatened}$ Species <u>Conservation Act 1995</u>) and plants (within the meaning of that Act), and their habitats	Refer to section 6 of this report and the <i>South West Rocks: Ecological Assessment,</i> September 2006, prepared by ERM,

Fart/ Clause / (subclause) number	Consideration	Comments
(h)	Measures to conserve fish (within the meaning of Part 7A of the <i>Fisheries</i> <u>Management Act 1994</u>) and marine vegetation (within the meaning of that Part), and their habitats	The conservation of any marine life was considered through the development of a Stormwater Management Plan (SMP) which ensures that no pollutants will enter any coastal water bodies.
i)	Existing wildlife corridors and the impact of development on these corridors	The site was not identified as contributing to these corridors, nor was it identified as a key habitat in the National Parks and Wildlife Services map of key habitats and regional and subregional fauna movement corridors within the north east of NSW. Refer to <i>South West Rocks: Ecological Assessment</i> , September 2006, prepared by ERM for further details.
Ú	The likely impact of coastal processes and coastal hazards on development and any likely impacts of development on coastal processes and coastal hazards	Due to the location of the site from the foreshore, there is no impact on coastal processes and/ or hazards.
k)	Measures to reduce the potential for conflict between land-based and water- based coastal activities	The proposal will not result in any conflict between land – based and water-based coastal activities as it is not located on the foreshore.
[]	Measures to protect the cultural places, values, customs, beliefs and traditional knowledge of Aboriginals	Refer to section 6.5 and South West Rocks: Aboriginal Heritage Assessment, September 2006, prepared by ERM of this report.
m)	The likely impacts of development on the water quality of coastal waterbodies	Refer to section 6.3 and South West Rocks: Stormwater Management, September 2006, prepared by ERM of this report.

Part / Clause / (subclause) number	Consideration	Comments
(u	The conservation and preservation of items of heritage, archaeological or historic significance	Refer to section 6.5 and South West Rocks: Aboriginal Heritage Assessment, September 2006, prepared by ERM of this report.
(o	Only in cases in which a council prepares a draft local environmental plan that applies to land to which this Policy applies, the means to encourage compact towns and cities	N/A - Land is zoned for residential development.
(d	Only in cases in which a development application in relation to proposed development is determined: <i>i</i>) the cumulative impacts of the proposed development on the environment, and <i>ii</i>) measures to ensure that water and energy usage by the proposed development is efficient	Refer to Section 6 of this report for an analysis of key issues, the impacts of the proposed development on the environment and a discussion on water sensitive urban design measures to be implemented.
Part 4 Clause 13	A provision of an environmental planning instrument that allows development within a zone to be consented to as if it were in a neighbouring zone, or a similar provision, has no effect.	The proposal does not rely on flexible zoning provisions.

/Clause/ Consideration Comments Comments	A consent authority must not consent to The site is more than three kilometres from Front Beach and would therefore not restrict or inhibit public access to the an application to carry out development coastal foreshore. Se 14 an application to carry out development coastal foreshore. Se 14 an application to carry out development coastal foreshore. Se 14 an application to carry out development coastal foreshore. Se 14 an application to carry out development coastal foreshore. Se 14 an application to carry out development coastal foreshore. Se 14 an application to carry out development coastal foreshore. Se 15 an application to carry out development will, or is likely to, result in the impeding or diminishing, to any extent, of the physical, land-based right of access of the public to or along the coastal foreshore.	The consent authority must not Effluent from the residential subdivision would be disposed of via the reticulated sever system. se 15 consent to a development on land to which this Policy applies in which the filtent is proposed to be disposed of by means of a non reticulated system if the consent authority is satisfied the proposal will, or is likely to, have a negative effect on the water quality of the sea or any nearby beach, or an estuary, a coastal lake, a coastal creek or other similar body of water, or a rock platform.
Part / Clause , (subclause) number	Part 4 Clause 14	Part 4 Clause 15

(subclause) number Part 4 The consent a		
mber		
	authority must not grant	The consent authority must not grant Stormwater will be discharged into the existing reticulated system. Water sensitive urban design measures are
Clause 16 consent to a de	levelopment application to	consent to a development application to incorporated in the subdivision to address water quality. Refer to Section 6.3 and South West Rocks: Stormwater
carry out deve	slopment on land to which	carry out development on land to which Management, September 2006, prepared by ERM.
this Policy i	this Policy applies if the consent	
authority is c	authority is of the opinion that the	
development	development will, or is likely to,	
discharge untr	discharge untreated stormwater into the	
sea, a beach, or	sea, a beach, or an estuary, a coastal lake,	
a coastal creek	a coastal creek or other similar body of	
water, or onto a	water, or onto a rock platform.	

5.4 KEMPSEY LOCAL ENVIRONMENTAL PLAN (LEP) 1987

The site is currently zoned as 2(a) Residential. The objective of the zone is *"to provide areas for low density residential development"*.

Residential subdivision is permissible with consent within the zone.

The allotment sizes for the proposed subdivision will range from 506 square metres to 1815 square metres providing additional opportunities for low density residential development, consistent with the objective of the zone.

Clause 12 prohibits Council from consenting to a subdivision unless it is satisfied that:

'(a) the land is outside the limit of the 1 in 100 year flood and is not subject to an unacceptable risk from localised flooding during a 1 in 20 year storm event;...

(c) in the case of land in the Zone No 2(a) the allotments to be created by the subdivision each include not less than 500 square metres of land which is outside the limit of the 1 in 100 year flood and which is not subject to an unacceptable risk from localised flooding during a 1 in 20 years storm event".

Council maps indicate that land below 3.6 AHD is flood-prone, which affects ten proposed lots in the south west corner of the site. These lots are proposed to be filled to a minimum 3.6 metres AHD. Further discussion on the impact on flooding is set out in section 6 of this report.

Clauses 13 and 14 require each lot to be able to be connected to a sewerage system and reticulated water supply or other arrangements that are satisfactory to Council. The subdivision will connect the existing reticulated systems and infrastructure will be designed and installed to allow for easy change over to the South West Rocks dual reticulated system when it comes on line.

Clause 16 of the Kempsey LEP states that Council shall not consent to the subdivision of land unless each proposed allotment has an area of at least 500 square metres. The proposal complies with this provision of the LEP.

5.5 OTHER PROVISIONS

5.5.1 Strategies, Plans and Policies

Other plans that apply to the site but do not limit development in a Part 3A application pursuant to *Section 75R* of the EP&A Act are identified below.

North Coast Regional Environmental Plan 1988

The North Coast Regional Environmental Plan (NCREP) sets the basis for new urban and rural development. The aim of the NCREP is to encourage the development of regional policies that protect the natural environment, encourage an efficient and attractive built environment and guide development into a productive yet environmentally friendly future. It also aims to provide a basis for growth in the region, optimising the economic social benefits to the local community and visitors.

The NCREP includes development controls for coastal development that relate to protecting access and sunlight to the foreshore. The subject site is approximately three kilometres from Front Beach and as such will not affect the amenity of the coastal foreshore in terms of overshadowing or access.

Clause 34 sets out objectives relating to heritage items, which are:

"(a) to conserve the environmental heritage (including the historic, scientific, cultural, social, archaeological, architectural and aesthetic heritage) of the North Coast Region;

(b) to promote the appreciation and understanding of the North Coast Region's distinctive variety of cultural heritage items and conservation areas including significant buildings, structures, works, relics, towns and precincts, and

(c) to encourage the conservation of the Region's historic townscapes which contain one or more buildings or places of heritage significance or which have a character and appearance that is desirable to conserve".

No European or Aboriginal heritage sites were found on the subject site. This is further discussed in section 6 of this report.

Clause 41 sets out objectives relating to housing, which are "to promote the provision of a range of adequate, affordable and suitable housing to meet the needs of the region's population".

The *Kempsey Residential Release Strategy* (1997) predicts that 74.1 hectares of residential land at South West Rocks will be required between 2006 and 2016 to meet housing demand. The project will meet part of the demand for housing in South West Rocks by providing the opportunity for 44 new houses in South West Rocks.

The proposal provides for low density detached dwellings, which provides a housing stock that appeals to families.

Clause 43 sets out development controls for residential development, which states that Council shall not grant consent to development for residential purposes unless:

(a) "it is satisfied that the density of the dwellings have been maximised without adversely affecting the environmental features of the land,

(b) it is satisfied that the proposed road widths are not excessive for the function of the road,

(c) it is satisfied that, where development involves the long term residential use of caravan parks, the normal criteria for the location of dwellings such as access to services and physical suitability of land have been met,

(d) it is satisfied that the road network has been designed so as to encourage the use of public transport and minimise the use of private motor vehicles, and

(e) it is satisfied that site erosion will be minimised in accordance with sedimentation and erosion management plans".

This is discussed in section 6 of this report.

Kempsey Shire Council Local Land Release Strategy 1997

The Kempsey Shire Council *Residential Land Release Strategy* was prepared to satisfy the requirements of the NCREP and seeks to guide future land use decisions in an integrated manner.

The site is identified in the 'Residential Supply Register' located in Schedule 2 of the *Residential Land Release Strategy* as a future release area. The site is identified for short term release (SWR1). The proposed subdivision provides for the future growth and development of South West Rocks in manner that considers the features of the site and surrounds, and can connect to existing services.

NSW Coastal Policy 1997

The 1997 NSW Coastal Policy (NSW Government 1997) provides a strategic framework to guide decision making for the future development of the NSW Coast and to balance and co-ordinate management of the coast's unique physical, ecological, cultural and economic attributes.

The policy brings together all planning and management activities that are occurring in relation to the coast and places emphasis in the consideration of the four principles of Ecologically Sustainable Development (ESD). ESD is the philosophy used in the policy that provides a framework for reconciling or making choices between competing demands for use of the coast's resources, together with consideration of the intrinsic fragility of the coastal environment.

The goals of the Coastal Policy 1997 with relevance to the proposed development of the study site, are:

- protecting, rehabilitating and improving the natural environment;
- recognising and accommodating the natural processes;
- protecting and enhancing the aesthetic qualities;
- protecting and preserving the cultural heritage;
- providing for ecologically sustainable development and use of resources;
- providing for ecologically sustainable human settlement; and
- providing for appropriate public access and use.

This proposal has considered each of the above goals to create a subdivision that provides for sustainable human settlement and development. The subdivision:

- is consistent with the zoning of the land and the strategic framework for the residential development of South West Rocks;
- has been designed in consideration of the ecological features of the site, the potential for aboriginal significance and the existing capacity of infrastructure and road network;
- has been designed to incorporate asset protection zones to safeguard life and property form bushfire hazards;
- incorporates a tree retention plan and landscaping concept plan and proposes to prepare built form controls to ensure that future development contributes to the aesthetics of the area;
- incorporates best practice stormwater management by providing a detention basin / sediment pond, stormwater controls and the installation of a separate non-potable water supply pipe network which will connect to Council's proposed recycled water reticulation main when it comes online;
- is in proximity to existing bus routes (Gregory Street) and bus stop, which provides residents with the opportunity to use public transport.

Coastal Design Guidelines for New South Wales

The coastal design guidelines supplement SEPP 71, regional strategies and local plans and settlement strategies. The guidelines are addressed in section 3.2.2 of this report.

NSW Floodplain Management Manual

Floodplain Development Manual 2005 relates to the development of flood liable land for the purposes of section 733 of the Local Government Act 1993. The Manual highlights the government's ongoing commitment to managing the risks resulting from natural hazards to reduce their impacts on the people of NSW. It recognises the benefits of use, occupation and development of flood prone land.

Whilst the flood used to determine the residential FPL is a decision of the local council, the Manual states that FPLs for typical residential development would generally be based around the 100 year flood plus an appropriate freeboard (typically 0.5m). The *Guideline on Development Controls on Low Flood Risk Areas – Flood plain Development Manual*, states that unless there are exceptional circumstances, councils should adopt the 100 year flood as the FPL for residential development.

The project adopts the policy provision by adopting the FPL as the 1%AEP plus freeboard.

5.5.2 Kempsey Shire Council Development Control Plans and Policies

Kempsey has three development control plans (DCP) and a number of policies which apply to the site and are relevant to the proposal.

They are:

- DCP 9 South West Rocks and Spencerville;
- DCP 22 Local Housing Strategy (Urban Areas);
- DCP 36 Guidelines for Engineering and Subdivision;
- Tree Preservation Order;
- Flood Risk Management Policy;
- Parking Code.

The policies and DCPs have been taken into consideration in the preparation of technical reports. Consistency with the provisions of the above DCP's and policies is set out in the following.

Development Control Plan No. 9 – South West Rocks and Spencerville (DCP 9)

The proposed works fulfils the aim of the DCP 9 to facilitate the orderly development of the land for urban purposes.

Development Control Plan No. 22 – Local Housing Strategy (Urban Areas) (DCP 22)

This DCP applies to urban areas of Kempsey Shire other than Crescent Head, focusing on land zoned 2(a), 2(b1), 2(b2), 2(c), 2(d), 2(v), 3(a), 3(b), 3(c) and 3(v) under Kempsey Local Environmental Plan 1987.

In particular this plan applies to all proposals for medium density development (referred to as *cluster housing, dual occupancy, multiple dwellings* and *residential flat buildings*), new dwelling houses and subdivision in Kempsey Shire.

Table 5.2 demonstrates how the proposal complies with relevant DCP controls.

Section	Consideration	Comments
3.1 Lot size and orientation	Where subdivision is proposed, lots are to have appropriate area and dimensions to enable the siting and construction of a <i>dwelling</i> or dwellings and ancillary outbuildings, whilst providing for: i) useable private outdoor space; ii) convenient vehicle access and parking; iii) adequate solar access in accordance with DCP No.31- Energy Smart Homes; and iv) access to cooling breezes and other relevant siting and design considerations.	Proposed lot sizes as a result of the subdivision will range from 506 square metres to 1815 square metres providing opportunities to accommodate dwellings, private open space, on site car parking in a manner that achieves a sustainable urban design.
3.5b Streetscape	Subdivision for residential development is to be designed so as to provide opportunities for retention of mature or <i>important vegetation</i> and to encourage establishment of an attractive streetscape.	The implementation of appropriate landscaping plans and the retention of as many existing vegetation on site where possible will encourage the establishment of an attractive streetscape. A tree retention plan was prepared based on landscape design elements, an arborist report and an ecological impact assessment.
3.6a Landscaping	The appearance, amenity and energy efficiency of new development for users and the general community should be enhanced by new development.	The proposed subdivision has been designed to provide opportunities for future development to contribute to Arakoon Road and Gregory Street streetscapes and to retain mature trees where appropriate.
3.6d Landscaping	Landscaping shall utilise predominantly <i>endemic species</i> which are appropriate for the intended purpose.	Proposed landscaping indicates predominantly endemic species (<i>refer to Figures 3.9 and 3.10</i>).
3.7a Infrastructure and Services	Any development proposal is to be so designed as to ensure that the demands generated by the development are not beyond the capacity of the site or any related infrastructure or services.	Investigations indicate that there is sufficient infrastructure capacity to accommodate the proposed subdivision.
4.10 Erosion and Sediment Control		Refer to Soil Water Management Plan submitted with the EA.

Table 5.2Compliance with DCP 22

Section	Consideration	Comments
4.11 Infrastructure and Services		Refer to Section 6.7 of this report
 Special Provisions for South West Rocks 11.2 	Lot size and Orientation	The average lot size is 730.5 square metres.
11.3	The minimum average allotment size for subdivision in South West Rocks shall be 650m2. Streetscape	In order to contribute to the streetscape, single dwelling covenants will be placed on the subdivided lots to maintain the current land use pattern surrounding the site.
		The retention of mature trees, permeable fencing and landscaping on site will contribute to the streetscapes of Gregory Street and Arakoon Road. Tree protection measures will be implemented during the construction phase to protect the trees to be retained. The trees to be retained are shown in Figure 3.8. The tree retention plan is based on arboricultural and ecological investigations.

The subdivision will be constructed in accordance with the engineering requirements set out in DCP 36.

Tree Preservation Order

The aim of this Order is to prevent unnecessary removal or damage to Australian native vegetation and any trees identified as being a significant asset to the Kempsey Shire.

This Order applies to the subject land as it is identified in a Residential 2(a) zone where the lot has an area greater than 1000m2.

An arborist report and a Tree Retention Plan (*Refer to Figure 3.8*) have been developed with regard to the aim of this Order.

Kempsey Shire Council Flood Risk Management Policy

The objectives of the Kempsey Shire Council Flood Risk Management Policy are:

- 1. "To ensure that new development in flood prone land is compatible with the degree of flood hazard and that adequate floor risk management measures are incorporated in the design of the development thereby minimising the possibility of loss of life and damage to property.
- 2. To encourage the re-development of existing flood prone lands in a manner that will minimise the chance of loss of life and damage to property by future flooding.
- 3. To prevent the creation of any "new area" of urban development on flood prone lands..."

Spencers Creek runs within 150 metres of the study area, at which point it is a major creek approximately 50 m in width. The 100-year Average Recurrence Interval (ARI) flood in Spencers Creek is reported to reach RL 3.6 in the vicinity of the site and this will cause backwater flooding of the south western corner of the site.

A covenant will be imposed on affected lots requiring buildings to have floor levels at least 300mm above the 100-year ARI flood level.

Refer to *Figure 6.3 Flood Extent Plan* which identifies the extent of flood prone land on the site and Section 6.3.2 for further discussion on flooding.

ENVIRONMENTAL RESOURCES MANAGEMENT AUSTRALIA

6 ANALYSIS OF KEY ISSUES

6.1 INTRODUCTION

This chapter provides an assessment of the key environmental issues arising from the proposed subdivision and recommends mitigation and management regimes to address these issues. The issues addressed are in accordance with the requirements of the Director General (DGRs) issued 5 July 2006.

The design of the proposed subdivision has evolved in response to environmental investigations and the recommended mitigation and management measures included in the supporting technical documents. Further information is contained in the technical reports submitted as part of this environmental assessment (EA) report.

6.2 FLORA AND FAUNA

An ecological assessment of the site was completed during the preparation of the EA report. The assessment included background literature reviews and database searches prior to field investigations.

The Department of Environment and Conservation (DEC) Wildlife Atlas Database was searched for records of threatened species listed under the NSW *Threatened Species Conservation Act 1995* (TSC Act) within the locality. An online search for matters of National Environmental Significance (NES) protected under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) was also undertaken for the locality.

Field investigations of the site were undertaken by two ecologists from 18 to 21 April 2006.

The following sections set out the key findings of the assessment, which are documented in the *Environmental Assessment Report - Gregory Street, South West Rocks First Draft, prepared by ERM, December 2006.*

6.2.1 *Threatened Species*

Fauna

Threatened fauna species recorded during the field investigations by ERM in April 2006 included the:

- Brush-tailed Phascogale, which is listed as Vulnerable under the NSW *Threatened Species Conservation Act* 1995 (TSC Act);
- Squirrel Glider, which is listed as Vulnerable under the NSW TSC Act;
- Grey-headed Flying-fox, which is listed as Vulnerable on both the NSW TSC Act and the Commonwealth EPBC Act. The species was recorded foraging within the site; and

Myotis adversus (Fishing Bat), *Miniopterus australis* (Little Bent-wing Bat), *Mormopterus norfolkensis* (Eastern Freetail Bat) and *Miniopterus schreibersii* (Eastern Bent-wing Bat) which are all listed as Vulnerable under the NSW TSC Act (*Refer to Figure 6.1 Identified Threatened Species and Hollow Bearing Trees*)

Figure 6.1 shows the location where the above species were identified.

Section 6.2.2 discusses the implications of the proposed subdivision on the habitat of these species.

No other threatened fauna species were recorded.

Flora

No threatened flora species were recorded on the site.



6.2.2 Fauna Habitat

The mature native trees and shrubs on-site provide potential habitat for the following threatened species: Squirrel Glider, Brush-tailed Phascogale, Greyheaded Flying-fox and microchiropteran bats as well as other non-threatened fauna species such as the Brush-tailed Possum (*Trichosurus vulpecula*), Sugar Glider and Ring-tailed Possum (*Pseudocheirus peregrinus*).

The proposal will remove potential habitat for the Squirrel Glider and Brushtailed Phascogale. However, given the large size of home ranges for these species and the limited resources available on site, it is likely that the site represents only a small part of a home range for the individuals captured during the field work. Home ranges of the Squirrel Glider have been estimated to be between 0.65 and 8.55 hectares, varying according to habitat quality and availability of resources (ERM, 2006(c)). The Brush-tailed Phascogale has a much larger home range, with the females inhabiting territories of approximately 20 to 60 hectares, while the males maintain territories of up to 100 hectares. The territory of a female is exclusive however the territory of a male may overlap with other females and males (ERM, 2006(c)).

The site provides potential foraging habitat for the Grey-headed Flying-fox however it is not a known camp site for this species. Therefore the proposal is unlikely to displace any Grey-headed Flying-foxes.

Twelve hollow-bearing trees were recorded within the site (*Refer to Figure 6.1 Identified Threatened Species and Hollow Bearing Trees*). Most of the hollows were less than 5 cm in diameter. These trees may provide sheltering habitat for the Squirrel Glider, Sugar Glider, Brush-tailed Phascogale, microchiropteran bats and small parrot species. Given the small size of the hollows however, it is unlikely that they provide habitat for large birds or large arboreal mammals.

The proposal will result in the removal of nine hollow-bearing trees from the site. Although it is unknown whether any of the microchiropteran bats currently roost on site, as a precautionary measure, bat boxes will be installed in trees to be retained, prior to any vegetation removal. It is also unknown as to whether there are Squirrel Glider dens or Brush-tailed Phascogale nests on site. Nevertheless, nest boxes will be installed in trees to be retained, prior to any vegetation removal. This will provide alternative potential habitat for species that may be utilising the hollow-bearing trees on site and reduce the potential impacts of hollow-bearing tree removal and displacement of individuals.

The installation of 19 nesting boxes to offset the removal of nine hollow bearing trees is included in the draft statement of commitments set out in section 7 of this report.

6.2.3 Fauna Movements

From interpretation of aerial photographs and topographic maps of South West Rocks, any potential corridor function of the site appears to be currently restricted by several areas of developed and cleared land within the locality.

Residential development along Gregory Street to the west of the site would restrict fauna movements from the site and from Hat Head National Park to heavily vegetated areas to the northwest. It is likely that fauna movement can now only occur in this direction from the National Park via scattered trees or the riparian vegetation along Spencers Creek.

Land to the north of the site consists of rural residential properties and some wooded lots that have been zoned for future residential development. North of these lands cleared land with scattered trees provides limited connection to wetland and estuarine vegetation to the north and the northeast.

Directly north east of the site fauna movement could occur along a narrow corridor of roadside vegetation along Arakoon Road, and further east to the vegetation of the Smoky Cape Range (part of Hat Head National Park).

To the south a narrow corridor of woodland / forest vegetation exists along Gregory Street, providing the potential for fauna movement from Hat Head National Park northwards to the site. West of this corridor wetland vegetation would restrict the movement of forest-dependent fauna.

There is some connectivity of the trees within the site to vegetation to the north and south, which may provide for some local movement and dispersal from nearby Hat Head National Park. It is however, unlikely that the site provides for major movement and dispersal of fauna in the locality. National Parks and Wildlife Services produced a map of key habitats and regional and subregional fauna movement corridors within the north east of NSW (Canri Website). Two regional corridors occur within the locality of the site. The site was not identified as contributing to these corridors, nor was it identified as a key habitat.

6.2.4 Vegetation

Disturbance at the site has resulted in reduced floristic diversity and invasion of many weed species, particularly Blackberry. If site maintenance (slashing) were not occurring at the site then it is likely that the ground cover would be dominated by Blackberry, Lantana and Bracken Fern (*Pteridium esculentum*).

A following four vegetation communities were identified on site.

- Scribbly Gum / Tallowwood Woodland, which occurred across most of the site and was dominated by *Eucalyptus microcorys* (Tallowwood) and *E. haemostoma* (Scribbly Gum). This vegetation community is not listed as threatened under State or Commonwealth legislation.
- Blackbutt Open Forest, occurred in the eastern portion of the site. *E. pilularis* (Blackbutt) and Tallowwood were the dominant canopy species in this part of the site. This vegetation community is not listed as threatened under State or Commonwealth legislation.
- Coastal Banksia, which occurred in a small area in the southwest of the site. This vegetation community is not listed as threatened under State or Commonwealth legislation.
- Forest Red Gum, which was predominantly found in the west part of the site. The shrub and ground cover had been extensively disturbed, with exotic grasses and pasture species being dominant. A large portion of this area had been fenced off and used for horse agistment. This community was previously considered (Connell Wagner, 2005) to be consistent with the endangered ecological community Subtropical Coastal Floodplain Forest. Further field investigations by ERM in 2006, identified the general absence of diagnostic understorey and ground cover species. This means that this area of vegetation can not be positively identified as Subtropical Coastal Floodplain Forest. In addition, as the *in situ* native biota have been largely replaced by exotic species, and the soil has been disturbed, it is considered that there is no potential for regeneration of the community.

The proposal will result in the removal of native flora species, however most of the species recorded were common species that are not unique to the site. The trees to be removed as part of the proposal would have a marginal impact on the cumulative loss of native habitat within the locality.

The proposal incorporates a range of measures will be implemented as part of the development of the site to mitigate and manage potential impacts to native fauna and flora:

- retention of trees as shown on *Figure 3.8*, to retain foraging and shelter habitat for the Squirrel Glider and Brush-tailed Phascogale that utilise the site. Retaining trees with a distance of 30 metres between crowns will allow the Squirrel Glider to continue to move through the site (*Refer to Figure 3.8*);
- retention of three hollow-bearing trees to maintain some potential habitat for native birds, microchiropteran bats and, potentially, the Squirrel Glider and Brush-tailed Phascogale recorded on the site (*Refer to Figure 3.8*);

- installation of habitat boxes in retained trees to provide alternative habitat for Squirrel Glider, Brush-tailed Phascogale, microchiropteran bats and small parrots;
- removal of vegetation to be undertaken outside of key breeding times of threatened species to reduce the potential impacts to the lifecycle and breeding cycles of those species;
- banning of cats from the residential development to mitigate the potential for increased predation from domestic animals associated with residential development;
- pre-clearance surveys will be undertaken prior to any removal of trees to ensure fauna are not injured when felling trees;
- education of residents at the point of sale and contract of each lot, regarding the types of fauna they might encounter on the site or in adjacent vegetation. The purpose of this is to increase awareness and appreciation of the surrounding environment and the need to adhere to recommended mitigation measures;
- planting of endemic species in landscaped areas to mitigate the potential for exotic garden species that may escape into surrounding native vegetation; and
- tree protection measures will be implemented during the construction phase to reduce the potential impacts on retained trees from construction activities.

The retained vegetation is to be protected in accordance with the EA documentation as set out in the statement of commitments.

6.3 NATURAL HAZARDS

6.3.1 Bushfires

Bushfire hazard mapping was used to define bushfire prone land in the vicinity of the site. NSW Rural Fire Service (2001) defines "bushfire-prone land" as "those areas within or within 100 metres of high or medium bushfire hazard, or areas within or within 30 metres of low bushfire hazards". Such areas do not include existing residential areas or waterbodies.

Bushfire hazard mapping indicated that the site contained land classified as bushfire prone land, with the nearest mapped hazard occurring within the National Park and forested areas to the south and east. The risk posed by the proximity of the development to the nearest bushfire hazard was assessed in terms of NSW Rural Fire Service (2001) requirements for residential development. This included analysis of asset protection zones, levels of building construction required and the overall suitability of the development in the context of the bushfire risk in the locality.

The proposal includes Asset Protection Zones (APZs), which were determined in accordance with NSW Rural Fire Service (2001) guidelines. The required APZs are outlined in Table 6.1.

Direction from
Residential LandRequired Total Asset Protection Zone (Proposed)West (Urban land)0Northwest (Urban land)0Northeast (Forest)20m (20m)East (Forest)20m (20m)Southeast (Forest)40m (18m to 25m + Arakoon Road reservation)Southwest (Shrubland)35m (18m to 25m + Arakoon Road reservation)

Table 6.1Asset Protection Zone Requirements

The proposed APZ incorporates two areas, namely the:

- Inner Protection Area (IPA): Located immediately adjacent to the development, this area is maintained free of combustible materials (eg woodpiles) and with trees that are well spread out and do not form a continuous canopy. A minimum crown separation of 6 metres is required; and
- Outer Protection Area (OPA): Located as a buffer area between the hazard and the IPA, this area is managed as a fuel-reduced zone with a relatively discontinuous canopy to reduce the effects of direct flame, radiant heat and ember attack on the IPA.

The proposed APZ arrangement is shown on *Figure 6.2: Asset Protection Zones*.

The subdivision design ensures that each lot has sufficient area for dwelling construction outside the APZs.



Primary vehicle access for fire fighting and emergency escape is provided from Cooper Street. Fire fighting access to the interface areas to the east is via Cooper Street and Arakoon Road. Areas to the south can be accessed from Arakoon Road directly.

In addition to the APZ other specific bushfire hazard reduction measures will be incorporated in the proposal, namely:

- Use of 19mm metal tap fittings and provision of water supply points to residential areas; and
- The construction of dwellings to meet the appropriate Level of Construction in accordance with AS3959-1999, relative to the distance of the dwelling site to the nearest hazard.

6.3.2 Flooding

Spencers Creek runs within 150 metres of the site, at which point it is a major creek approximately 50 metres wide. The 100-year Average Recurrence Interval (ARI) flood in Spencers Creek is reported to reach RL 3.6 in the vicinity of the site, which will cause backwater flooding of the south western corner of the site (Refer to *Figure 6.3 Flood Plan*). It is proposed to fill this area to RL 3.6 metres AHD. Generally, between 0.5 metres and one metre of fill depth will be required.

Filling the south-western corner will result in a loss of approximately 400 cubic metres of flood storage volume during a 100-year ARI flood in Spencers Creek. This is expected to have negligible impact on flood levels in Spencers Creek, which is estimated to be in the order of eight millimetres near the site reducing to 0 millimetres within 500 metres upstream of the site. Any detention basin or pollution control elements proposed will need to be protected from inundation or be located above the 100-year ARI flood level.

A covenant will be imposed on affected lots requiring buildings to have floor levels at least 300mm above the 100-year ARI flood level.

6.3.3 Acid Sulphate

A review of the Kempsey Acid Sulphate maps shows that the site is not included in the area where acid sulphate soils exist. This was verified by acid sulphate screen testing completed by Coffey Geotechnics Pty Ltd, 334 – 356 *Gregory Street, South West Rocks, Geotechnical Assessment,* October 2006.



6.4 WATER CYCLE MANAGEMENT

6.4.1 Water Sensitive Urban Design And Water Reuse

The development seeks to reduce urban impacts using a variety of water sensitive urban design (WSUD) principles. The principles include reduced demand for potable water, reduced runoff rate, reduced runoff volumes and reduced contaminant loads to assist in the collection and management of stormwater runoff in an efficient, cost effective and environmentally friendly way. The goal of WSUD is to reduce the quantity, while improving the quality of stormwater runoff to waterways, thus improving environmental outcomes for surrounding rivers and streams.

The proposed development will include a range of WSUD measures, including, the requirement for rainwater tanks to be installed for each dwelling, water efficient fittings to be prescribed in dwellings and the construction of a sediment/detention basin with infiltration capability. In addition a gross pollutant trap with capacity to trap oils and greases will be installed at the entry to the basin.

A separate non-potable water supply pipe network will be installed to reduce demand on potable water when it is connected to Macleay Water's proposed dual reticulation system.

Disposal of sewage and other wastewater will be through connection to the existing sewage collection and treatment system.

6.4.2 Drainage

Conventional piped drainage systems and road geometry are proposed in accordance with Council's design requirements. Roads will be kerbed and guttered and will provide a suitably graded overland flow path to the proposed detention basin and sediment pond in the electricity easement in the southwestern corner of the site. All site drainage will flow to this basin with the possible exception of some infiltration devices at the rear of properties backing onto Arakoon Road. The detention basin will be sized to ensure post-development peak flows do not exceed pre-development flows. The banks of the detention basin will be mounded to 3.6 metres AHD, equivalent to the 1 in 100-year ARI flood.

Pipes will be sized to convey the 10-year ARI runoff without surcharge and roads and other overland flow paths will be designed to convey the 100-year ARI runoff safely (i.e. minimum freeboard of 300 mm to habitable areas and velocity.depth factor <0.4). No adverse cumulative stormwater drainage or water quality impacts are anticipated as a result of the proposed development. There may be a very small improvement in the quality of flows to receiving waters.

6.4.3 *Receiving Waters*

Given the distance (approximately 200 metres) and the level difference (approximately +1 metre) between the discharge point from the site to Spencers Creek and the SEPP14 wetland to the south and southeast of the site, it is not possible for any pollutant leaving the site to impact on this wetland. The quality of runoff from the proposed development will need to meet relevant guidelines and standards – generally *ANZECC*, 2000 Guidelines for *Fresh and Marine Water Quality* – before discharge to Spencers Creek.

6.4.4 Erosions And Sediment Controls

During the construction phase, exposed earthworks and stockpiles have the potential to cause sediment laden runoff if erosion and sediment control measures are not properly implemented.

Stormwater controls will be implemented to prevent pollutant discharges during construction of the development, in accordance with an Erosion and Sediment Control and Stormwater Management Plan submitted as part of this EA. The Plan will be prepared in accordance with *Managing Urban Stormwater* – *Soils and Construction* (Landcom, 2004).

6.5 HERITAGE

6.5.1 European Heritage

ERM completed a search of the Heritage databases (including the Register of the National Estate, National Heritage List, commonwealth Heritage List and the NSW Government Gazette) in February 2006. The search revealed 14 registered heritage sites in the South West Rocks area, none of which were on or adjacent to the site.

6.5.2 Aboriginal Heritage

A search of the Aboriginal Heritage Information Management System (AHIMS) Aboriginal Sites Database at DEC within 3.5 km radius surrounding the site was undertaken on 20 February 2006. The search identified 70 recorded sites, which comprised 61 middens (two of which are associated with burials, one associated with an open site, and one associated with a burial and open site), three burials, two open sites, one bora/ceremonial site and scarred tree, one natural mythological (ritual) site, one contact mission and one scarred tree. Midden exposures along Spencers Creek were found in close proximity to the site, with two of the midden exposures (22-4-0017 and 22-4-0019, which have the same geographic coordinates) appearing to be within the site.

Given the proximity of the site to recorded Aboriginal heritage sites along Spencers Creek and the possibility of two midden exposures located within the site, field work was completed to verify if there were any Aboriginal heritage sites. A field survey was completed on 20 April 2006. The Kempsey Local Aboriginal Land Council (LALC) was invited to provide a representative for fieldwork but no one from the LALC was available.

No Aboriginal sites were found on the site during the field survey. The two midden exposures previously recorded as being within the site (according to AHIMS records) were not located. It appears that the translation of the AHIMS database's geographic coordinates for the two midden exposures has resulted in an inaccuracy with the new coordinates.

The absence of artefacts (including shells) in the eroded and extensive exposures on-site indicated the poor archaeological value of the site and as such the heritage assessment report (ERM, 2006(d)) concluded that no further Aboriginal heritage work was required.

Further discussion on aboriginal heritage is set out in the *Aboriginal Heritage Assessment Report* prepared by ERM, 2006.

6.6 TRAFFIC MANAGEMENT AND ACCESS

Proposed Road Design

The proposed road layout provides two way roads in a form that allows for the lot layout to respond to the features of the site and existing road network. It is designed to meet the road and carriageway width requirements of the Kempsey Development Control Plan No 36 – Guidelines for Engineering and Subdivision, which provides assistance with the design and construction of engineering works associated with subdivisions and developments (refer to Table 6. 2).
Category of Road	Traffic Volume (Vehicles/day)	Carriageway Width Minimum in metres	Total Road Width including Road Reserve
Type 1: Access Place	200	7	15
Type 2: Local Street	2,000	9	16
Type 3: Collector Road	6,000	11	19
Type 5: Arterial (2 lane)	10,000	15 including median	22
Type 6: Arterial (4 lane)	>10,000	25 including median	34

Table 6.2Typical Minimum Widths of Urban Roads, Kempsey DCP 36

The proposed road widths are listed below.

- *Internal Road No.* 1 serves up to 41 allotments (approximately 360 vehicles/day), falling into the 'Local Street' category. The road reserve is 16 metres wide with a 9 metres wide carriageway.
- *Cooper Street* adjacent to Gregory Street would change from servicing approximately 10 allotments to 54 following Stage 3. The sealed pavement from the Gregory Street intersection to the east boundary of Lot 120 would be widened with half road construction fronting the subject land as shown on drawing 47/3833/2 Rose Atkins Surveyors as part of Stage 2 of the development.
- *Internal Road No.* 2 serves up to 22 allotments, (approximately 200 vehicles/day) and *Internal Road No.* 3 serves only 6 allotments (54 vehicles/day). These roads therefore can be classified as 'access places' and will have 7 metres wide carriageways. *Internal Road No.* 2 will have 4.5 metres verges on either side and *Internal Road No.* 3 will have a 3.5 metres with verge.

The design avoids direct vehicle access to Gregory Street but provides for pedestrian movement within the subdivision and to Gregory Street.

Traffic Generation and Intersection Implications

Traffic generation from the proposed development was predicted to result in a maximum of 396 additional daily vehicle movements to Gregory Street via Cooper Street (east) (ERM, 2006 (b)). Table 6.3 sets out the estimated additional traffic generation along Gregory Street and Cooper Street, east of Gregory Street.

Road	Location	Year 2006 Estimate (base case)	Year 2016 Estimate (base case)	Year 2016 Additional Development Traffic	% Increase Due to Additional Developmen
	North of	3,910	4,795	+198	4.1
Gregory	Cooper Street				
Street	South of	3,910	4,795	+198	4.1
	Cooper Street				
Cooper	East of	90	90	+396	440
Street	Gregory Street	90	90	+396	440

Table 6.3 Additional Daily Traffic Volumes, Year 2016 including Development

Table 6.3 indicates that traffic volume along Gregory Street is predicted to increase from 3,910 to 4,795 vehicle movements between the year 2006 to 2016. There is no predicted increase in traffic movements along Cooper Street.

When taking into consideration the traffic generation from the proposed development, in percentage terms, the future traffic increase will be noticeable on Cooper Street however it will be negligible (4.1 percent) on Gregory Street. The affect on traffic along Cooper Street is expected considering that it currently only serves ten dwellings.

The implication of the traffic increases on intersection performance was assessed using the aaSIDRA traffic modelling software. Analysis was undertaken on the following scenarios:

- year 2006 (existing) traffic volumes, based on ERM traffic surveys;
- year 2016 (base case), projected from ERM and Council data;
- year 2016 with development traffic added; and
- Year 2016 traffic volumes with through traffic doubled, to test sensitivity and operation during the summer tourist peak.

The results are shown in Table 6.4.

Table 6.4Intersection Performance with Proposed Development

Scenario	Degree of Saturation	Level of Service	Average Delay(s)
Year 2006 AM peak (Current Conditions)	0.126	А	10.7
Year 2016 AM peak (Base case)	0.158	А	11.6
Year 2016 AM peak + development	0.160	А	13.0

The results set out in Table 6.4 indicate a marginal increase (up to 1.4 seconds on average) at the Cooper Street and Gregory intersection in 2016 when the traffic generated by the proposal is taken into consideration. The Level of Service was maintained at 'A'.

When taking into consideration a cumulative impact of the development application lodged with Kempsey City Council for a 17 lot subdivision of land on the north side of Cooper Street (DA number 2004/35), which will have temporary access to Cooper Street, the results indicate that the intersection continues to perform at high Levels of Service (A) (refer to Table 6.5).

Table 6.5Intersection Performance of Cumulative Development Scenario

Scenario	Degree of Saturation	Level of Service	Average Delay(s)
Year 2006 AM peak (Current Conditions)	0.126	А	10.7
Year 2016 AM peak	0.156	А	12.3
Year 2016 AM peak with development	0.162	А	13.2

The above results indicate that the Cooper Street/Gregory Street four-way give-way intersection will continue to operate a high Levels of Service (A) into the future, even when including traffic generation from other proposed development in Cooper Street east of Gregory Street. Based on intersection performance, the traffic assessment concluded that no major upgrades (such as a roundabout) were warranted at this location and maintaining the give-way arrangement was considered appropriate to avoid impeding through traffic along Gregory Street.

To further increase the safety at Cooper Street/Gregory Street intersection, the traffic assessment (ERM, 2006(b)) recommended that Cooper Street (east of Gregory Street) be re-sealed and widened from the intersection with Gregory Street to the east boundary of Lot 120 in Stage 2. This should be completed in accordance with relevant AUSPEC and RTA (1999) design guidelines as part of Stage 2 of the development.

Pedestrian, Cycle And Bus Movement

There are currently no off-road pedestrian or cyclist links along Gregory Street or Arakoon Road in proximity to the site. The nearest footpath / cycle path along Gregory Street is located adjacent to the shopping centre, north of Spencers Creek Road.

During traffic surveys, pedestrian movements were observed along the grassed Gregory Street road verge in proximity to the site. They were associated with both resident movements (recreation) and school children.

The proposal will provide sealed footpaths along one side of the proposed internal roads and Gregory Street (adjacent to the site) to facilitate pedestrian movement to and from Gregory Street. The design also provides a road network that could be utilised by cyclists accessing Gregory Street (refer to Landscape Concept Plan prepared by SMA).

The site is well located close to an existing bus route, which runs along Gregory Street, between the South West Rocks town centre and Kempsey. The nearest existing public bus stop to the site is located on the eastern side of Gregory Street, north of the Cooper Street/Gregory Street intersection. School buses operate along Gregory Street and utilise the bus stop. The proposed sealed footpaths will facilitate pedestrian movement between the site and the existing bus stop (refer to Landscape Concept Plan prepared by SMA).

For further discussion on traffic and transport refer to the *Traffic Impact Assessment* report prepared by ERM, 2006.

6.7 INFRASTRUCTURE PROVISION

Infrastructure is provided near the site (*Refer to Figure 6.4: Water and Sewer Locality Plan*). A sewer main runs along the west side of Gregory Street and there is a sewer pump station on the site. Water mains extend along Gregory Street, the north side of Cooper Street and along the north site of Arakoon Road. Electrical and telecommunication infrastructure also run adjacent to the site. The proposal will connect into these systems.

The development site is currently serviced with existing waste management services as provided by Council. Council confirmed that waste disposal services to the site are available on a weekly basis. The widths of the proposed roads and turning circles are sufficient to allow waste management trucks to circulate through the site and service each lot.



The EA has described the potential impacts of the proposed objectives of key environmental aspects associated with the pr	tential impacts tal aspects assoc	of the proposed development and iated with the proposal together wit	The EA has described the potential impacts of the proposed development and the measures proposed to mitigate these impacts. A summary of the objectives of key environmental aspects associated with the proposal together with mitigation measures is provided in the following table.
Table 6.6 Summary of K	ey Environment	Summary of Key Environmental Risks and Proposed Mitigation	
Potential Environmental Risk	Project Phase	Objective	Proposed Mitigation
Flora and Fauna Development of the site has the potential to result in a loss of	Construction	To protect habitat.	The proposal will retain trees (including hollow bearing trees), where practical, on site as per the existing tree plan submitted with this EA. In addition, habitat
Glider, Sugar Glider, Brush-tailed Phascogale as well as microchiropteran bats.			Pre-clearance surveys will be completed prior to any removal of trees to ensure that fauna are not injured when felling trees.
			The proposed landscaping will include indigenous tree planting and native shrub planting.
Development of the site has the potential to enhance feral, domestic / stray animal population on the site.	Post construction	To minimise the impact of domestic animals.	Cats will be banned from the residential subdivision via a Section 88B restriction included on lot titles. Education of residents regarding the types of fauna they may encounter on site will be completed. The purpose of this is to increase awareness and appreciation of the surrounding environment and the need to adhere to recommended mitigation measures.
Existing trees to be retained may be damaged during construction Surface water	Construction	To protect trees to be retained	Tree protection measures will be implemented during the construction phase.

ENVIRONMENTAL RISK ANALYSIS

6.8

Potential Environmental Risk	Project Phase		Proposed Mitigation
Construction works have the potential to result in increased sedimentation and nutrient loading of creeks on site as well as downstream.	Construction	To minimise sedimentation and nutrient loading during construction.	To mitigate the potential environmental impact of sediment laden water from the construction zones of the residential subdivision being discharged from the site, the soil and water management / erosion and sedimentation control plan submitted with this EA will be implemented.
The development could change in the type and concentration of water borne pollutants in stormwater runoff from the site.	Construction and Post construction	To achieve a high degree of protection for existing streams (including their riparian vegetation) and receiving water bodies.	The development will incorporate water sensitive urban design measures (WSUD), which includes a combination of a sediment/detention basin with infiltration capability. In addition a gross pollutant trap with capacity to trap oils and greases will be installed at the entry to the basin.
			A conventional piped drainage system and road geometry will provide a suitably graded overland flow path to the proposed detention basin and sediment pond.
			Water quality monitoring on site will occur at the completion of each development stage of the subdivision to ensure that water quality objectives are achieved.
Flood flows could be a risk to property for 11 lots in the residential subdivision.	Post construction	To protect property from potential flood flows.	Land in the south west corner of the site will be filled to RL3.6 and buildings on lots affected by fill will be required to have floor levels at least 300 mm above the 100 year ARI flood level.
			The banks of the detention basin will be constructed to RL3.6 to avoid any risk of surcharge or contamination.
Bushfire The land is adjacent to land identified as bushfire hazard.	Post Construction	To manage bushfire risk to protect life and property.	The residential subdivision adopts critical design considerations to manage bushfire risk, namely Asset Protect Zones (APZs), construction standards, access and water supply. A Section 88B Instrument for relevant lots will provide for fuel management

Tariff and prohibit development with the Asset Protection Zones is to be in accordance with <i>Huming for Bushfire Protection</i> (RFS 2001) or a specified by the Network and the size it to constitute is a construction is at the gateway Next Band Interiation is at the gateway Post The subdivision is at the gateway Post To soluth West Mode and there is a construction Construction to the character of the subdivision the stretescapes of the adjoining contributes to ensure that it contributes To ensure the advector the astretic stretescapes along Gregory Street, Arakoon Road and internal streets. Tariff. The subdivision has been designed to avoid the development furning its back or transition are at visit and the stretescapes of the adjoining contribute to attractive streetscapes along Gregory Street, Arakoon Road and internal streets. Tariff. The subdivision has been designed to avoid the development furning its back or trading area. Tariff. The subdivision has been designed to avoid the development furning its back or trading area. Tariff. The subdivision has been designed to avoid the development furning its back or tradition and the foregory Street brancteric or the subdivision has been designed to avoid the development furning its back or traditions and construction management rest the stretescapes to los from internal roads and construction management rest to tradite safety pain will be prepared prior to any works. Tariff. Construction activities don or tradition and evector or the evection activities and evecting and evecting and evect	Potential Environmental Risk	Project Phase	Objective	Proposed Mittigation
PostTo ensure the development contributesConstructionto the streetscapes of the adjoining roads.ConstructionTo ensure construction activities do not result in unacceptable traffic safety risks.PostTo ensure that utilities and services are sufficient to service the development.				and prohibit development within the Asset Protection Zones is to be in accordance with <i>Planning for Bushfire Protection</i> (RFS 2001) or as specified by the NSW Rural Fire Service.
Post To ensure the development contributes Construction to the streetscapes of the adjoining roads. Construction activities do not reads. To ensure construction activities do not result in unacceptable traffic safety risks. Post To ensure that utilities and services are construction sufficient to service the development.	Visual			
Construction To ensure construction activities do not result in unacceptable traffic safety risks. Post To ensure that utilities and services are construction Post To ensure that utilities and services are sufficient to service the development.	The subdivision is at the gateway to South West Rocks and there is a	Post Construction	To ensure the development contributes to the streetscapes of the adjoining	The subdivision design has taken into consideration the aesthetics of the site. It endeavours to retain as many trees as possible within the development to
ConstructionTo ensure construction activities do not result in unacceptable traffic safety risks.PostTo ensure that utilities and services are constructionronstructionsufficient to service the development.	need to ensure that it contributes to the character of the		roads.	contribute to attractive streetscapes along Gregory Street, Arakoon Road and internal streets.
ConstructionTo ensure construction activities do not result in unacceptable traffic safety risks.PostTo ensure that utilities and services are constructionronstructionsufficient to service the development.	surrounding area.			
ConstructionTo ensure construction activities do not result in unacceptable traffic safety risks.PostTo ensure that utilities and services are constructionronstructionsufficient to service the development.				The subdivision has been designed to avoid the development 'turning its back' on Gregory Street by requiring dwellings to front Gregory Street, restricting vehicle access to lots from internal roads and constructing a permeable fence along the Gregory Street boundary.
ConstructionTo ensure construction activities do not result in unacceptable traffic safety risks.PostTo ensure that utilities and services are constructionronstructionsufficient to service the development.	Traffic			
Post To ensure that utilities and services are construction sufficient to service the development.	Vehicles accessing the site during construction activities may be a risk to traffic safety.	Construction	To ensure construction activities do not result in unacceptable traffic safety risks.	A Traffic Management Plan (or traffic section of the construction management plan) will be prepared prior to any works.
Post To ensure that utilities and services are construction sufficient to service the development.	Infrastructure Implications			
construction sufficient to service the development.	Development of the site has	Post	To ensure that utilities and services are	The proposed subdivision can connect to existing utilities and services. A
ity and	implications for existing utilities and services including sewer,	construction	sufficient to service the development.	separate non potable water supply pipe network will be installed to reduce the demand on potable water when it is connected to the Macleay Water's proposed
	ity			dual reticulated system.
A Section 355 instrument for lots will require the installation of a rain on each lot.				
				A section 88b instrument for lots will require the installation of a rainwater tank on each lot.

DRAFT STATEMENT OF COMMITMENTS FOR THE PROJECT

7.1 BACKGROUND

7

The commitments listed in the following section have been compiled based on the environmental assessments undertaken in the preparation of this EA (refer to *Table 7.1*). They provide a commitment from the proponent to ensuring that the project is environmentally, socially and economically sustainable. The commitments indicate responsibilities and timing, to implement measures to minimise the risk of potential environmental impacts that have been identified through this assessment.

							Timing	For the duration of	subdivision. Responsibility of the	Macleay Valley Property	Group.	For the duration of subdivision	Responsibility of the Macleay Valley Property	Group.	
Table 7.1 Draft Statement of Commitments	Applicant's name: Peter Anderson - Macleay Valley Property Group	Applicant's address: PO Box 3254 NARELLAN D.C. NSW 2567	Owner's name: Macleay Valley Property Group Pty Limited, Marilyn Elizabeth Tramby and Stephen Michael Scott.	Owner's address: PO Box 3254 NARELLAN D.C. NSW 2567	Land to be developed: Lot 2 in DP 581117 - 334-356 Gregory Street, South West Rocks	Proposed Development: Staged residential development subdividing 1 lot into 46 lots	No. Item Commitment and Responsibility		Development EKM, October 2006 and supporting reports, except where amended by other items of this statement of Commitments and the approved Development Plans prepared by Rose Atkins Survevors listed below:	Stage 1 – 47/3833/1	Stage 2 – 47/3833/2 Stage 3 – 47/3833/3	 Statutory The following licences, permits and approvals will be obtained and maintained for the residential subdivision: Requirements Construction Certificates for engineering works (including earthworks, soil and water management, clearing, roadwork, 		 Kempsey Council Subdivision Certificates for each stage; Section 138 Consent for roadwork (Roads Act 1993); 	Country Energy Design Certification;

0045027/FINAL/19 FEBRUARY 2007

So.	Item	Commitment and Responsibility	liming
		 Country Energy notification of Arrangement; Telstra Compliance Certificate; Macleay Water Compliance Certificate; A Notice of Commencement of Building or Subdivision work and Appointment of Principal Certifying Authority is to be submitted to Kempsey Shire Council two days prior to commencing work. 	
ю.	Convey- ancing	A final plan of subdivision and Section 88B instrument will be prepared for each stage of the development. The Section 88B Instrument will provide: easements for utility services located on private land or public reserves; APZs and fuel management measures on private land, right of carriageways over access handles; and the requirement for the installation of a rainwater tank.	Responsibility of the Macleay Valley Property Group.
4.	Landscaping	Areas to be dedicated as public roads will be embellished by Macleay Valley Property Group Pty Limited in accordance with the <i>Landscape Plan</i> prepared by Scott Murray and Associates (December 2006) and documented in the detailed landscape design plans to be approved by Kempsey Shire Council as part of the construction Certificate. Following the release of the Subdivision Certificate the Macleay Valley Property Group will remain responsible for the maintenance of landscaping within the public road reserve for a period of 6 months and provide a landscape bond to the amount of \$20,000 as security.	Prior to release of Subdivision certificate Kempsey Shire Council or accredited certifier for stages 2 and 3.
ப்	Public Open space dedication	The area of land containing stormwater management facilities, will be dedicated to Kempsey Shire Council as public road.	Prior to the release of the Subdivision certificate Kempsey Shire Council or accredited certifier for stage 3.
6.	Tree Management	All trees to be retained within the proposed public roads and/or within the lot boundaries will be identified on tree retention plan prepared by prepared by Scott Murray and Associates (December 2006) and the engineering plans submitted to Kempsey Council with the Construction Certificate Application.	Prior to the release of the Construction Certificate for stages 2 and 3.

ENVIRONMENTAL RESOURCES MANAGEMENT AUSTRALIA

0045027/FINAL/19 FEBRUARY 2007

²	No. I	Item	Commitment and Responsibility	Timing
		ent	Macleay Valley Property Group Pty Limited will create under section 88B a covenant/restriction on each lot that stipulates the banning of all cats from the development	Prior to the release of the Subdivision Certificate Kempsey Shire Council or accredited certifier for stages 2 and 3.
∞ ES Management Australi		2	Macleay Valley Property Group Pty Limited will prepare an education program for purchasers regarding the fauna on site.	Prior to the release of the Subdivision Certificate Kempsey Shire Council or accredited certifier for stages 2 and 3.
6		L r	Macleay Valley Property Group Pty Limited will install 19 habitat boxes in retained trees prior to any construction works or removal of hollow bearing trees and engage a suitably qualified person to inspect and maintain the 19 habitat boxes for a period of 12 months after the installation.	Prior to any construction works or removal of hollow bearing trees.
10	0	N re	Macleay Valley Property Group Pty Limited will engage a suitably qualified person to conduct pre-clearance surveys prior to the removal of any trees.	Prior to the removal of any trees.
11	L 1	2	Macleay Valley Property Group Pty Limited will avoid tree removal from May to September.	For the duration of subdivision.
0045027/FINAL/1	12 Const	Construction M A	Macleay Valley Property Group Pty Limited will construct the subdivision in accordance with the staging set out on the Project Application Plan.	

ENVIRONMENTAL RESOURCES MANAGEMENT AUSTRALIA

0045027/FINAL/19 FEBRUARY 2007

No.	Item	Commitment and Responsibility	Timing
13		A Construction Environmental Management Plan will be prepared that will include:	Prior to the
		an education strategy for construction contractors;	commencement of
		description of the work program outlining relevant timeframes for activities;	construction.
		 details of statutory and other obligations that must be met during construction and operation, including all approvals and acreements required from authorities and other stakeholders: 	
		 description of the roles and responsibilities for all relevant employees involved in the construction phase; 	
		• details as to what incident management procedures will be undertaken during construction or operation;	
		• the minimisation of rubbish and debris at the site from development activities during the construction phase;	
		 Erosion and sequment control during construction; Management of traffic. 	
14		Construction Work shall be confined to 7.00am to 6.00pm, Monday to Fridays, and 7.00am to 12 noon, Saturdays.	
15		Inspections are required to be made and a minimum of 48 hours notice is necessary where requesting an inspection. Appointments will be made in accordance with the inspection program for the area. Where inspections are carried out by an accredited certifier other than Kempsey Shire Council, compliance certificates will be required following each inspection and	
		forwarded immediately to The Principal Certifier.	
16		All fill to be imported to the site will be either VENM (virgin excavated natural materials) or suitable for classification as 'inert' under NSW DEC guidelines	
17		Macleay Valley Property Group Pty Limited will prepare work as executed plans for construction work in each stage and provide such plans to Kempsey Council.	Prior to the release of the subdivision certificate for each stage
18		Macleay Valley Property Group Pty Limited will prepare works as executed plans in a format compatible with the geographic information system (GIS) of the Kempsey Council to assist with the Council asset management database.	Prior to the release of the subdivision certificate for each stage

No.	Item	Commitment and Responsibility	Timing
19		Macleay Valley Property Group Pty Limited will complete the civil work in accordance with Kempsey Shire Council's AUSSPEC Construction Specifications	
20		Detailed Engineering Plans providing for Civil Works within the subject property will be undertaken in strict compliance with Kempsey Shire Council's <i>Engineering Guidelines for Subdivision and Development DCP 36.</i>	
		 Design controls will be prepared by Macleay Valley Property Group and implemented for the residential lots through the use of a restrictive covenant on the titles to the lots. The Built Form Controls will specify: building setbacks; APZ setbacks where necessary; Building height. 	Prior to the release of the subdivision certificate by Kempsey Shire Council stages 2 and 3.
21	Fire Management	Asset protection zones will be provided within the rear of allotments along the southern boundary (adjacent to Arakoon Road) and the east boundary, in accordance with the bushfire Impact Report prepared by ERM 2006.	Prior to the release of the Subdivision Certificate by Kempsey Shire Council for stage 3.
22		Fuel management within the Asset Protection Zones and Asset Protection Zones are to be in accordance with <i>Planning for Bushfire Protection</i> (RFS 2001) or as specified by the NSW Rural Fire Service.	Prior to the release of the Subdivision Certificate by Kempsey Shire Council for Stage 3.
23	Water Supply and Quality Management	Macleay Valley Property Group Pty Limited will design and install water quality control measures substantially in accordance with the <i>Stormwater Management Plan</i> dated December 2006, <i>Residential Subdivision Proposal</i> Drawing Number 51162-C prepared by Hadlow Design Services, 27 October 2006 and Construction Certificate Plans approved by Kempsey Council.	Prior to the release of the subdivision certificate by Kempsey Shire Council stages 2 and 3.

No.	Item	Commitment and Responsibility	Timing
24		Macleay Valley Property Group Pty Limited will implement the soil and water management plan prepared by Hadlow Design, December 2006, to control run off during construction in accordance with the principles of the Landcom publication <i>Managing Urban Stormwater</i> (MUS): Soils and Construction Volume 1, 4 th Edition and Construction Certificate Plans approved by Kempsey Council	Prior to commencement of construction
25		Macleay Valley Property Group Pty Limited will maintain soil and water management measures until 80% of the housing within the stormwater catchment draining to such measures are constructed for each stage. At that time the maintenance of stormwater quality control measures will be transferred to Kempsey Council.	
26		Macleay Valley Property Group Pty Limited will create all easements under section 88b to the satisfaction of Kempsey Shire Council to cover all stormwater assets.	Prior to the release of the construction certificate for stages 2 and 3.
27		Macleay Valley Property Group Pty Limited will construct the Detention Basin as a first step in Stage 2 as an erosion and sedimentation control measure.	
28	Cultural Heritage	If any artefacts or sites relating to aboriginal heritage are uncovered during site works, all work will cease and the NSW Department of Environment and Conservation be contacted to advise on what must occur prior to re-commencing works.	During construction
29	Public Utilities		Prior to the release of the subdivision certificate for
		Macleay Valley Property Group Pty Limited will provide reticulated potable and non-potable water supply, sewerage and underground electricity to each residential lot.	stages 2 and 3.
30		Macleay Valley Property Group Pty Limited will provide sewer, water mains, stormwater drainage and roads substantially in accordance with <i>Residential Subdivision Proposal</i> Drawing Number 51162-C prepared by Hadlow Design Services, 27 October 2006.	Prior to the release of the construction certificate for stages 2 and 3.
31		Macleay Valley Property Group Pty Limited will provide a concrete footpath along one side of Internal Roads 1 and 2.	Prior to the release of the construction certificate for

	ITTOIT	Commitment and Kesponsibility	Timing
			stages 2 and 3.
32		Macleay Valley Property Group Pty Limited shall make satisfactory arrangements with Telstra Australia for the provision of <u>underground telephone plant</u> to each lot. A letter from Telstra stating that satisfactory arrangements have been made for the provision of underground telephone plant is to be lodged with Kempsey Shire Council.	Prior to the release of the construction certificate for stages 2 and 3.
33		Macleay Valley Property Group Pty Limited is to make satisfactory arrangements with Country Energy for the supply of electricity to each lot. A letter from Country Energy stating that satisfactory arrangements have been made for the provision of <u>underground electricity</u> supply to this development is to be lodged with Kempsey Shire Council.	Prior to the release of the construction certificate for stages 2 and 3.
34		Macleay Valley Property Group Pty Limited will bear the cost of the relocation of utility services required as a result of construction of the development.	
35	Roads	The proposed internal roads shall be constructed and dedicated for the full frontage of all the lots in accordance with Drawing Number 47/3833/5 prepared by Rose Atkins Consulting Surveyors.	Completed prior to the release of the subdivision certificate for the particular stage.
36		Cooper Street (east of Gregory Street) will be re-sealed and widened to relevant AUSPEC and RTA (1999) design guidelines as part of Stage 2 of the development, for the length from the intersection with Gregory Street to the eastern boundary of Lot 120.	
37		Macleay Valley Property Group Pty Limited shall provide a concrete foot path as documented in the EAR in the Gregory Street reservation adjacent to the site.	
38		Macleay Valley Property Group Pty Limited will provide street signs for each new public road in accordance with the requirements of Kempsey Council.	

No.	Item	Commitment and Responsibility	Timing
VIRONMENTAL RESOURCES M	Contributions	Macleay Valley Property Group Pty Limited will pay Section 94 developer contributions in accordance Councils Section 94 plans on a "per ET" basis for each stage of the residential subdivision.	Prior to the release of the subdivision certificate by Kempsey Shire Council or accredited certifier for each stage.
40		Macleay Valley Property Group Pty Limited will submit an application for a Certificate of Compliance pursuant to Section 305 of the <i>Water Management Act 2000</i> and the lodgement of a Certificate of Compliance indicating that the requirements of Section 306 of the <i>Water Management Act 2000</i> have been met	Prior to the release of the subdivision certificate by Kempsey Shire Council for each stage.
41		y iq	Prior to the release of the subdivision certificate by Kempsey Shire Council for each stage.
		 b) Payment of a contribution towards sewerage headworks at a rate of \$6,300 per equivalent tenement, i.e. \$6,300 x 20 ET = \$126,000 total for 2006/2007 (Indexed) Stage 3 	
		c) Payment of a contribution towards water supply at a rate of $$7,468$ per equivalent tenement, i.e. $$7,468 \times 24$ ET = $$179,232$ total for 2006/2007 (Indexed)	
045027/FINAL/7		 d) Payment of a contribution towards sewerage headworks at a rate of \$6,300 per equivalent tenement, i.e. \$6,300 x 24 ET = \$151,200 total for 2006/2007 (Indexed) 	

ENVIRONMENTAL RESOURCES MANAGEMENT AUSTRALIA

	No.	Item	Commitment and Responsibility	Timing
	42		Macleay Valley Property Group Pty Limited will pay a contribution towards <u>Outdoor Recreation</u> for each additional dwelling unit after the first dwelling unit in accordance with Kempsey Shire Council's Section 94 Contributions Plan.	
			The contribution is to be paid prior to the release of the Subdivision Certificate, at the rate prevailing at that time.	
 Macleay Valley Property Group Pty Limited will pay a contribution towards <i>Stormwater</i> for each additional dwelling un first dwelling unit in accordance with Kempsey Shire Council's Section 94 Contributions Plan. The contribution is to be paid prior to the release of the Subdivision Certificate, at the rate prevailing at that time. c) Stage 2 - Payment of a contribution towards <u>Stormwater</u> at a rate of \$2,101 per equivalent tenement, i.e. \$2,101 \$\$42,020 total for 2006/2007 (Indexed) d) Stage 3 - Payment of a contribution towards <u>Stormwater</u> at a rate of \$2,101 per equivalent tenement, i.e. \$2,101 \$\$ 				
 The contribution is to be paid prior to the release of the Subdivision Certificate, at the rate prevailing at that time. c) Stage 2 - Payment of a contribution towards <u>Stormwater</u> at a rate of \$2,101 per equivalent tenement, i.e. \$2,101 \$42,020 total for 2006/2007 (Indexed) d) Stage 3 - Payment of a contribution towards <u>Stormwater</u> at a rate of \$2,101 per equivalent tenement, i.e. \$2,101 \$50,424 total for 2006/2007 (Indexed) 	43		Macleay Valley Property Group Pty Limited will pay a contribution towards <u>Stormwater</u> for each additional dwelling unit after the first dwelling unit in accordance with Kempsey Shire Council's Section 94 Contributions Plan.	
			The contribution is to be paid prior to the release of the Subdivision Certificate, at the rate prevailing at that time.	
 d) Stage 3 - Payment of a contribution towards <u>Stormwater</u> at a rate of \$2,101 per equivalent tenement, i.e. \$2,101 > \$50,424 total for 2006/2007 (Indexed) 				
			 d) Stage 3 - Payment of a contribution towards <u>Stormwater</u> at a rate of \$2,101 per equivalent tenement, i.e. \$2,101 x 24 ET = \$50,424 total for 2006/2007 (Indexed) 	
	Macl	eay Valley	7 Property Group Pty Limited will pay Section 64 water and sewer developer contributions in accordance wit	- -
Macleay Valley Property Group Pty Limited will pay Section 64 water and sewer developer contributions in accordance with the development	servi	cing plan a	servicing plan applicable at the time of payment.	

2 5 5 a y y 2 ŋ

CONCLUSION

8

The preparation of the project has involved input from a range of disciplines including ecology, landscape architecture, heritage, engineering, traffic engineering, bushfire management, geotechnical assessment and planning to ensure that it responds to the features of the site and surrounds. In doing so the project contributes to achieving the strategic objectives for the South West Rocks in manner that is consistent with the objectives of the zone and responds to the environmental context of the site.

Annex A

Information Flyer

INFORMATION SHEET

RESIDENTIAL SUBDIVISION, GREGORY STREET, SOUTH WEST ROCKS





Introduction

Macleay Valley Property Group Pty Ltd is preparing an application for a 45 lot residential subdivision at the north east corner Gregory Street and Arakoon Road. This application is being made to the NSW Department of Planning under Part 3A of the NSW Environmental Planning and Assessment Act 1979. The purpose of this newsletter is to inform you about the proposal.

The Site

The site is at the corner of Gregory Street (South West Rocks Road) and Arakoon Road, South West Rocks. It is known as Lot 2 DP 581117 and is marked on the map to the left. This property is zoned 2(a) Residential A under the Kempsey Local Environment Plan 1987, allowing development for residential purposes with consent.

The Proposal

The proposal is for a 45 lot residential subdivision and the creation of a lot to accommodate the existing sewer pump station. The subdivision will occur in three stages:

Stage 1: annexing of the existing dwelling on the property (8057 m2) and creating a lot for the sewer pump station;

Stage 2: development of 20 low-density residential lots and a new access road from Cooper Street;

Stage 3: development of 24 low-density residential lots.

The proposal includes infrastructure works related to the subdivision. Access to the site will be from Cooper Street. No new access is proposed from Gregory Street.

The subdivision has been designed to create an attractive low density residential development that:

- is orientated to provide an attractive address to Gregory Street and Arakoon Road;
- allows for tree retention within the subdivision;
- incorporates stormwater management system to ensure water quality objectives are met;
- includes appropriate bushfire asset protection zones from bushland in the National Park to the south;
- provides for pedestrian and cycle access through the subdivision.





Proposed Subdivision Layout

What Is Happening Now?

The Minister for Planning has indicated that he will consider the proposal a 'major project' under Part 3A of the Environmental Planning and Assessment Act 1979. This means that the application and supporting documentation will be submitted and assessed by the NSW Department of Planning.

Macleay Valley Property Group Pty Ltd has commissioned Environmental Resources Management (ERM) Pty Ltd, an environmental and planning firm, to prepare the application and submit to the State Government. Key environmental issues that will be assessed as part of the application include: ecology (flora and fauna), stormwater management, visual impacts, traffic management and Aboriginal heritage.



Project Information Session

Macleay Valley Group Pty Ltd invites you to attend a project information display session to find out more about the proposed subdivision and provide comment. Representatives from Macleay Valley Property Group and the project team will be available at the session to explain the project and answer any questions that you may have.

Location: Rosarii site North east corner of Gregory Street and Arakoon Road, South West Rocks.

Date: Saturday 25 November, 2006

Time: 10.30am to 12.30pm

The application will be submitted to The Department of Planning later this year once the key environmental investigations have been completed. The draft will then be placed on public exhibition to provide the community, councils, government agencies and other interested parties the opportunity to comment on the proposal.

Further Information

If you would like further information about the public information session or the proposal, please contact Fiona van der Hoeven on the details below:

Environmental Resources Management Australia (ERM) Locked Bag 24, BROADWAY NSW 2007

Telephone: (02) 8584 8888



 ERM consulting services worldwide www.erm.com
 Image: Consulting services worldwide www.erm.com

 Environmental Resources Management Australia
 Image: Consulting Services Wanagement Australia

 Building C, 33 Saunders Street
 Pyrmont NSW 2009

 Telephone (02) 8584 8888
 Facsimile (02) 8584 8800