



# **DEVELOPMENT DOLPHIN POINT NSW**

## **CONCEPTUAL PLAN OF MANAGEMENT FOR STAGE 5 OF PROJECT**

# **DOLPHIN POINT RESIDENTIAL DEVELOPMENT**

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## **CONCEPTUAL PLAN OF MANAGEMENT FOR STAGE 5 OF PROJECT**



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[Cover Photograph: View of Swamp Sclerophyll Forest within the northern section of Stage 5]

# 1. INTRODUCTION: THE CONCEPT PLAN OF MANAGEMENT (CPM)

## 1.1 Overview

This Conceptual Plan of Management Plan (CPM) relates to land comprising Stage 5 of a proposed residential subdivision of land comprising Pt Lot 11 DP 1104789, and Pt Lot 72 and Pt Lot 73 DP 1073600 at Dolphin Point and at Burrill Lake, on the NSW South Coast.

Stage 5 of the overall project comprises land zoned 7(a) Environmental Protection (Ecology) and 6(b) Open Space (Private) under Shoalhaven LEP 1985. Existing forest and wetland vegetation largely falls within area zoned 7(a), with further stands in the 6(b) zone.

This stage of the project will provide for the protection and enhancement of significant remnant vegetation within the site, associated with further "offset" plantings of wetland vegetation, and open space uses.

Three small potential development parcels- all cleared land- have been identified for as possible locations for uses permitted in zones 7(a) and 6(b) such as tourism facilities and allied uses (subject to further investigation).

This CPM accompanies a concept application under the provisions of Part 3A of the Environmental Planning and Assessment Act 1979 and State Environmental Planning Policy (Major Projects) 2005.

At this concept planning stage, it is proposed that Stage 5 lands will be community property owned by persons who purchase allotments in Stages 2 and 3 of the development, subject to a section 88B Instrument which in turn refers to this plan of management. The long-term management of the land will be further refined in detail at a later stage of the planning process.

## 1.2 Environmental Objectives

The principle objective of this Conceptual Plan of Management Plan (CPM) is to provide an outline of management and mitigation measures- in conceptual terms only- to minimise the potential impacts of future land uses within or adjacent to Stage 5 of the proposed residential project.

This CPM lays the foundation for the future, detailed planning of Stage 5 at a later time in order to achieve the following general environmental objectives:

- Protection of on site cultural resources;
- Minimal disturbance of land;
- Conservation of key flora and fauna;
- Compliance with statutory requirements; and
- Minimise potential environmental impacts on the downstream receiving environment, in particular, Burrill Lake.

## 1.3 Environmental Features of Stage 5

This area described as Stage 5 contains remnant vegetation consisting of Spotted Gum Forest, and the endangered ecological communities Swamp Sclerophyll Forest (containing Bangalay Swamp Forest, Paperbark Shrubland), Swamp Oak Forest, and Coastal Saltmarsh. The land also contains some cleared areas, including dams and watercourses. The vegetated features provide for a setting that will contribute to an attractive urban environment for the adjacent proposed residential areas as well as being of ecological significance.

The concept application has focused on the ecological preservation of forested lands within Stage 5, as well as

the management of new plantings and stormwater control works, as well as other land uses.

## 1.4 What Activities are Proposed in Stage 5?

The following activities are proposed in Stage 5 that will generate the need for some ongoing management:

- Protection of Remnant Spotted Gum Forest on more elevated areas, as well as Remnant Bangalay/Banksia Forest/Woodland in more low-lying areas. Includes replanting of further "offset" vegetation, fencing, and surveying existing forested areas, protection of water quality and maintenance of hydrological regime, weed control, construction of trails;
- Construction of sediment dam and temporary water quality control devices nearest proposed residential development Stages 2 and 3, and general infrastructure works. Includes de-commissioning of temporary water quality control devices and construction of permanent water quality control structures, and maintenance of the existing creek that runs through the valley floor;
- Bush fire hazard reduction, construction of fire trails/tracks;
- Within the three (cleared) development parcels (i), (ii) and (iii), and subject to more detailed investigations, the potential for uses permissible under the Shoalhaven LEP 1985, including tourist facilities, bed and breakfast accommodation, and community facilities;
- Landscaping works generally;

Relevant environmental issues are discussed in Section 2 of the Site CPM. Section 3 outlines the planning and implementation measures proposed to mitigate environmental impacts.

## 1.5 The Role of Each Contractor

Contracts will be let for different construction activities. Each successful tenderer will have an important role in implementing the environmental management practices outlined in the Site CPM at the subdivision construction stage. The responsibilities of each Contractor are set out in the Site CPM.

This Site CPM forms a part of tender documentation and sets out the various responsibilities for matters arising from construction activities.

## 1.6 Amendment of the Site CPM

An objective of the tabular format is to allow for change and allow for the Site CPM to be a working document. If terms need altering, changes may be made, (after the appropriate consultation) to the individual tables.

The CPM can be amended by way of application to the relevant authority. The application shall:

- Be in writing; and
- Specify the provisions of the Site CPM to which the application relates; and
- State how the proposed amendments achieve the objectives of the provisions to which the amendments relate.

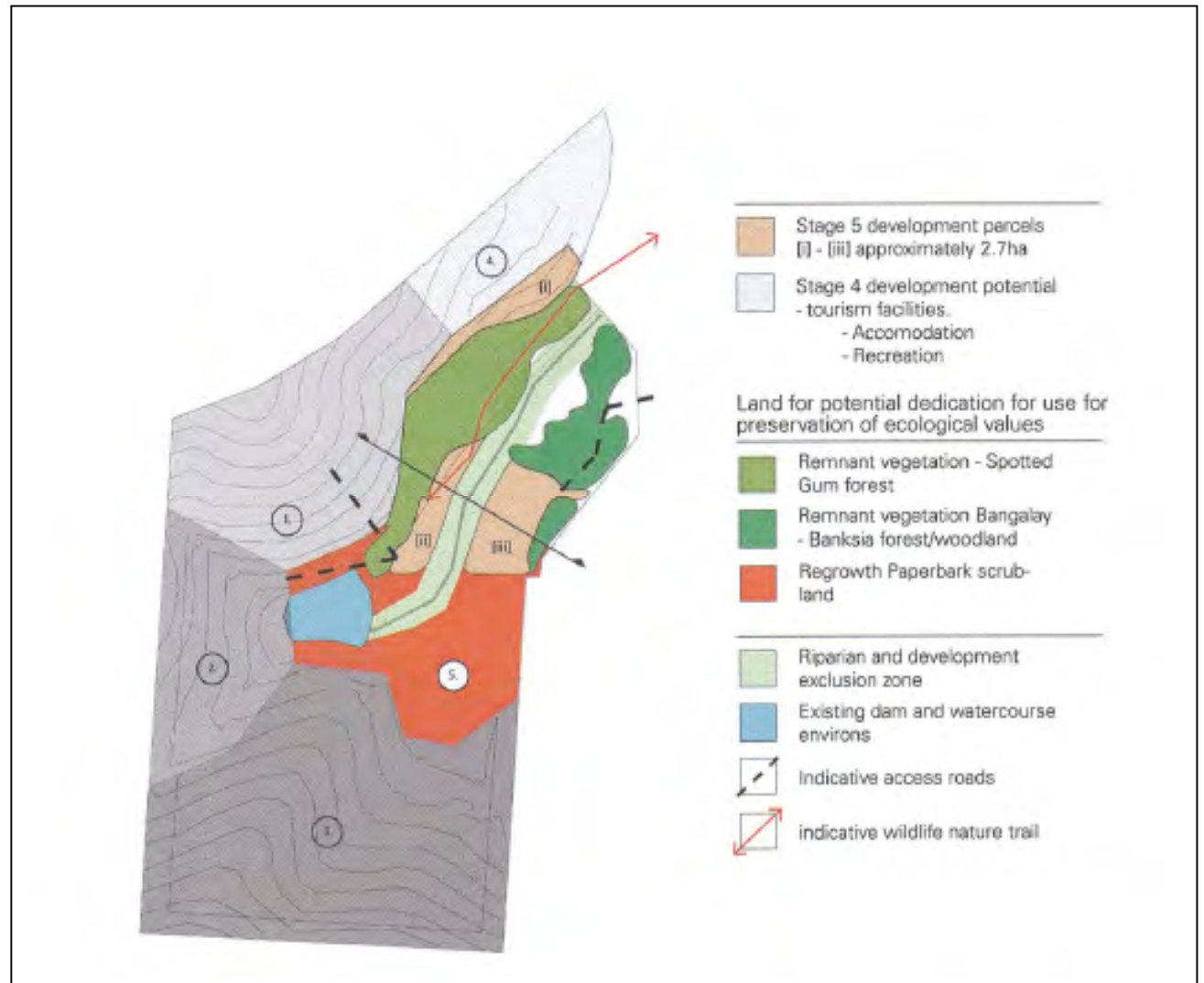


Figure: Conceptual land use management Stage 5

## 2. ENVIRONMENTAL ISSUES & IMPACTS CHECKLIST

### STAGE 5 DOLPHIN POINT DEVELOPMENT

<b><i>Environmental Issue</i></b>	<b><i>Likely Impacts &amp; Management Objectives</i></b>
<b><i>Acid Sulfate Soils</i></b>	The soils tested adjacent to the low-lying area near the wetland were assessed to be potential acid sulphate soil. Acid sulphate management measures are required if any excavation below about RL 3.5m was to occur.
<b><i>Water, Soil</i></b>	The objective will be to implement sediment and erosion control measures into work practices on site, and to ensure that the quality of the water leaving the development areas on the site do not adversely impact on the swamp forest on the valley floor, nor cause offsite impacts on the estuarine further downstream. To this end, a stormwater strategy has been devised that will effectively treat, control and direct stormwater runoff, incorporating best practice water sensitive urban design measures.
<b><i>Flora &amp; Fauna Conservation Areas, "Offset" Plantings</i></b>	Two of the vegetation communities within the site being Paperbark Shrubland and Bangalay Swamp Forest have been identified as having floristic and structural affinities within an endangered ecological community Swamp sclerophyll forest. The Conceptual Plan of Management includes actions to avoid, mitigate and offset impacts on the Swamp Sclerophyll Forest that will maintain or improve the biodiversity values of this endangered ecological community. In addition, the development will introduce offset measures by the provision of a significant area within Stage 5 as Swamp Sclerophyll Forest. Care will be taken to minimise impacts on lands not proposed for development.
<b><i>Bushfire Management</i></b>	Bushfires are common in bushland areas in the general locality. If unchecked, future bushfires in bushland surrounding the subject land will present a potential threat to life and property. Bushfire management measures are proposed to satisfactorily address this future threat, including creation and maintenance of bush fire asset protection zones and fire trails.
<b><i>Construction Management</i></b>	The Contractor has a responsibility to ensure that activities carried out during construction comply with relevant environmental objectives and requirements. Controls are to be placed on construction activities on site, to ensure that pollution potential is minimised. This will apply in particular to work carried out within or near the potential development parcels (i),(ii) and (iii).
<b><i>Cultural Sites Management</i></b>	Various reminders of the Aboriginal past have been found on the site, however, the level of disturbance is generally high. Various protocols are to be put in place for the ongoing protection and management of potential archaeological sites and cultural landscapes.

### 3. PLANNING & IMPLEMENTATION STAGE 5 DOLPHIN POINT DEVELOPMENT



Photograph: View of cleared, southern portion of Stage 5 viewed from SE side towards Spotted Gum/Bangalay Open Forest on hillside to west

## **ACID SULFATE SOILS**

<b>PLANNING</b>	<b>IMPLEMENTATION</b>	
<b><i>Environmental Issue</i></b>	<b><i>Work Instruction/Management Measures</i></b>	<b><i>Responsibility</i></b>
<ul style="list-style-type: none"> <li>• Acid sulfate soils measures</li> </ul>	<ul style="list-style-type: none"> <li>• The low lying sections of Stage 5 are identified as being in an area where there is a probability of occurrence of acid sulfate soils within the soil profile.</li> <li>• Preparation of a final acid sulfate soil management plan for any proposed works or development requiring excavation, and prior to the issue of Construction Certificate, to be followed and implemented during construction.</li> <li>• Further tests will be carried out on soils prior to excavation in order to comprehensively assess acid sulfate soil level on site.</li> <li>• All excavated soils will be treated with good quality agricultural lime to neutralise the acidity produced by the oxidation of the soils when excavated.</li> </ul>	<ul style="list-style-type: none"> <li>• Project Manager &amp; relevant Contractor</li> </ul>



PLANNING	IMPLEMENTATION	
<i>Environmental Issue</i>	<i>Work Instruction/Management Measures</i>	<i>Responsibility</i>
<ul style="list-style-type: none"> <li>• Sediment, stormwater controls               <ul style="list-style-type: none"> <li>- Construction of (temporary) Sediment Basin 1, including sediment fencing, clean water diversion.</li> <li>- Construction of larger (permanent) Sediment Basin 2- water quality pond/wetland.</li> <li>- Construction of gross pollutant traps (GPTs) and outlets.</li> </ul> </li> <li>• All work to be undertaken in accordance with the recommendations of Patterson Britton in their report.</li> </ul>	<ul style="list-style-type: none"> <li>• The existing dam will be one of the water quality control ponds (Sediment Basin 2). Remediation work to the dam will include:               <ul style="list-style-type: none"> <li>(a) Planting suitable vegetation, including macrophytes</li> <li>(b) Providing edge treatment to minimise mosquito habitat, and</li> <li>(c) Construction of a suitable outlet/spillway.</li> </ul> </li> <li>• The second water quality control pond (Sediment Basin 2) will be constructed downstream of the existing dam. This will have a surface area of approximately 5000m<sup>2</sup> and include the following;               <ul style="list-style-type: none"> <li>(a) Extensive planting including macrophytes</li> <li>(b) Suitable edge treatment to minimise mosquito habitat</li> <li>(c) Constructed outlet, and</li> <li>(d) An average minimum depth of 1 metre.</li> </ul> </li> <li>Sediment Basin 2 will be de-commissioned at the completion of Stages 2 and 3, and will be replaced by a bio-retention basin.</li> <li>• Existing surface water conditions in outside worked areas will be maintained. The water cycle management and water quality treatment systems for the proposal will be designed such that they maintain the existing hydrologic regime in the areas of the Swamp sclerophyll forest and Coastal saltmarsh and protect these communities from adverse water quality impacts.</li> <li>• Erosion and sediment control measures shall be implemented and maintained during the course of earthworks and construction of the subdivision, including roads and associated works, in order to minimise downstream sediment transfer.</li> <li>• Run-off and erosion controls are to be installed prior to commencement of any site works and shall be</li> </ul>	<ul style="list-style-type: none"> <li>• Foreman/Contractor</li> </ul>

	<p>continuously maintained during the period of construction. The measures are to incorporate:</p> <ul style="list-style-type: none"> <li>(a) diversion of uncontaminated run-off around cleared or disturbed areas,</li> <li>(b) a sediment fence or other device to prevent sediment and other debris escaping from the cleared or disturbed areas into drainage systems or waterways,</li> <li>(c) controls to prevent tracking of sediment by vehicles onto adjoining roadways by means of a “cattle grid” type shaker pad and associated ballast drive or similar controls</li> <li>(d) disturbed areas being turfed, mulched, paved or other methods approved by the Council, and</li> <li>(e) construction of gross pollutant traps and outlets, and</li> <li>(e) construction of temporary sediment basin (Sediment Basin 1) and permanent sediment basin (Sediment Basin 2).</li> </ul> <ul style="list-style-type: none"> <li>• If clearing occurs outside the area protected by sediment and erosion controls, additional sediment and erosion controls will be put in place prior to clearing.</li> <li>• Stockpiles should be stored or banded in a manner to prevent soil being washed offsite and respread as soon as possible following necessary earthworks, and prepared for primary revegetation by contour ripping if required.</li> <li>• Primary revegetation will be the dominant method of soil mobilisation control, with all soil cover revegetated with rapidly establishing species immediately following earthworks. All vegetation to be retained will be separated from construction areas in accordance with relevant requirements specified in any approval. Revegetation of area surrounding Sediment basin 1 upon de-commissioning with approved plantings.</li> <li>• Topsoil, excavated material, construction &amp; landscaping supplies and on site debris are to be stockpiled within the erosion containment boundary and shall not encroach upon any road.</li> <li>• All oil/fuel spills to be immediately cleaned up and the spilled material disposed of in a proper manner.</li> <li>• Stormwater quality is to be regularly monitored.</li> <li>• Clearly mark “no go” zones with temporary fences and signage.</li> <li>• Stormwater and roofwater (once the land is developed for housing) to drain and be dissipated into the ephemeral streams found on the site, in order to maintain existing hydrology and enhance water quality.</li> </ul>	
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<ul style="list-style-type: none"> <li>- Maintenance, monitoring.</li> <li>- Periodic inspection and removal of sediment, pollution, replacement of vegetation.</li> <li>• All work to be undertaken in accordance with the recommendations of Patterson Britton in their report.</li> </ul>	<p>To ensure the effectiveness of the sediment and erosion control and water quality control devices, the following maintenance activities will be undertaken:</p> <ul style="list-style-type: none"> <li>• An assessment of the existing dam and the second water quality control pond will be carried out during subdivision earthworks. The assessment will include water and sediment quality prior to off site discharge of retained water and/or removal of onsite use of sediments from the dams.</li> <li>• Periodic (6 month) inspection and removal of any gross pollutants and coarse sediment that is deposited in the water quality control pond and replacement of vegetation as necessary.</li> <li>• Periodic (3 month) and episodic (post storm greater than 1 year ARI) inspection and removal of trapped pollutants from all GPT's.</li> <li>• Sediment and erosion control devices would be regularly maintained and accumulated sediment removed before 50% of the capacity is used. Accumulated sediment would be re-used or disposed of in an acceptable manner off-site.</li> <li>• Sediment fences would be checked regularly for rips, excessive build up of sediment behind the fence, and breaches by construction activities. Damage to the fences would be repaired immediately on detection.</li> <li>• Surface water flows would be diverted around the designated site access to prevent sediment trapped within the access being re-suspended and transported offsite. Sediment that bypasses the stabilised site access, and is deposited on the nearby public streets would be cleaned up promptly by means other than washing into the drainage system.</li> <li>• Sediment and erosion control devices would be maintained until the disturbed areas have been adequately reinstated or new vegetation is sufficiently established.</li> <li>• Maintenance of the gross pollutant traps with be undertaken by the landowner of the Stage 5 land.</li> </ul>	
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## FLORA & FAUNA, CONSERVATION AREAS, 'OFFSET' PLANTINGS

PLANNING	IMPLEMENTATION	
<i>Environmental Issue</i>	<i>Work Instruction/Management Measures</i>	<i>Responsibility</i>
<p>Protection of bushland area, in particular Swamp Sclerophyll Forest on the valley floor in the northern part of Stage 5, "offset" areas</p>	<ul style="list-style-type: none"> <li>• Landscaping around the subdivision is designed to increase local filtration, to reduce runoff and local native species are to be planted to optimise water use. The use of local native plants and mulching is of great assistance and in addition gives an area a local ecological identity.</li> <li>• Approval required for the removal of any trees from the site that are outside the approved works area. The bush fire asset protection zones within the site are to be landscaped and shall include (but not be limited to) retention of nominated existing trees and new planting. All weeds need to be eradicated and controlled within any APZ. Priority shall be given to species listed as 'noxious plants' in the Shoalhaven Shire Council LGA.</li> <li>• Trees and nominated vegetated areas to be retained must be clearly fenced off for protection, including:               <ul style="list-style-type: none"> <li>- Hillside vegetation area- Spotted Gum/Bangalay Open Forest</li> <li>- Swamp Sclerophyll Forest (Bangalay Swamp Forest, Paperbark Shrubland)</li> <li>- Swamp Oak Floodplain Forest</li> <li>- Coastal Saltmarsh</li> <li>- Areas proposed to be planted out with "offset" vegetation.</li> </ul> </li> <li>• Mulch as much as possible and use for stabilising any disturbed areas. Exotic weeds to be removed from bushland areas to be protected, and must not be spread back as mulch. Pull out tree stumps, break them up and mulch them for future landscaping works. All weeds need to be eradicated and controlled within any Riparian Zones.</li> <li>• Existing trees not being removed as part of the development proposal must be retained.</li> <li>• Native species to be used to stabilise disturbed and "offset" areas. The proposed planting materials are to be selected on hardiness, ease of maintenance and proven ability in the area. Native species, shrubs and grasses will be planted out on site, with appropriate cover crops where required. Maintain in a weed-free condition for 2 years using low impact weed control methods.</li> </ul>	<ul style="list-style-type: none"> <li>• Land- owner, Project Manager, Contractor</li> </ul>



<p>Rehabilitation, replanting in “offset” areas, riparian zones, areas required for short-term use for water quality control devices downslope of Stage 2</p>	<ul style="list-style-type: none"> <li>• The extent of Swamp Sclerophyll Forest and Coastal Saltmarsh to be retained and offset will be marked in the field by an appropriately qualified person and the vegetation boundaries surveyed by a registered surveyor. Certification will be provided to Shoalhaven Council by an appropriately qualified person demonstrating that this has occurred prior to the release of a linen plan.</li> <li>• The management of retained and offset Swamp Sclerophyll Forest and Coastal Saltmarsh will be secured via positive covenants placed on the titles of the affected land requiring implementation of the approved vegetation management plan by the affected landowners. Details of the positive covenants will be included in the linen plan.</li> <li>• An appropriate perimeter fence will be constructed around areas of retained and offset Swamp Sclerophyll Forest. The perimeter fencing will be constructed prior to any earthworks occurring within stages 2, 3 and 5.</li> <li>• A detailed vegetation management plan will be prepared by a suitably qualified person for the retained and offset Swamp Sclerophyll Forest and Coastal Saltmarsh and for re-established riparian vegetation, to address matters including, but not limited to, protection and maintenance of the Swamp Sclerophyll Forest and Coastal Saltmarsh, weed control, vegetation enhancement, control of access, monitoring and fire management. The vegetation management plan will be submitted to Shoalhaven City Council prior to any works occurring on the site.</li> <li>• Restoration within riparian corridors should be commensurate with natural streams in terms of species diversity, and plant cover or density and asset protection zones.</li> <li>• The water cycle management and water quality treatment systems for the proposal will be designed such that they maintain the existing hydrologic regime in the areas of the Swamp Sclerophyll Forest and Coastal Saltmarsh and protect these communities from adverse water quality impacts.</li> <li>• All bare soil areas need to be stabilised with a nurse crop of inert or sterile Japanese Millet, Rye Corn and native grasses or re-vegetated immediately with appropriate local native plants.</li> <li>• All trees and vegetation to be retained will be appropriately protected from compaction of root systems, damage to trunks, and the build-up of soil around tree bases, by appropriate work practices during the construction phase of the proposal. The appropriate protection measures are to be in accordance with the recommendations of an appropriately qualified arborist or similar. These protection measures are to be implemented prior to earthworks occurring on the site.</li> <li>• All vegetation to be retained will be protected from unauthorised access during the construction phase of the proposal. An induction program for workers will be developed and implemented to inform them of the limitations of the construction site. Temporary fencing will be installed along the edges of vegetation to be retained and workers will be instructed to avoid encroaching into such vegetation.</li> </ul>	<ul style="list-style-type: none"> <li>• Land- owners, Project Manager, Flora/Fauna consultant, Contractor (Shoalhaven City Council role exclusively as an approval regulatory authority rather than as an actioning authority)</li> </ul>
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	<ul style="list-style-type: none"> <li>• Trees with hollows to be felled during the construction phase, will be felled in accordance with the following procedures: <ul style="list-style-type: none"> <li>- A fauna specialist appropriately licensed under the NSW <i>National Parks and Wildlife Act, 1974</i>, for the purpose of rescuing displaced animals, will supervise felling.</li> <li>- The fauna specialist will be suitably attired with protective clothing and have suitable equipment to undertake the work.</li> <li>- An appropriately skilled local wildlife carer must be notified at least 24 hours prior to the tree felling, that animals may be captured and that these animals may need care.</li> <li>- Any non-hollow-bearing trees around those with tree hollows to be felled will be removed first. At least one day will be left between clearing of the non-hollow-bearing trees and the hollow-bearing trees to allow fauna time to vacate the trees.</li> <li>- Prior to the felling of the identified and marked hollow-bearing trees, the trees will be shaken or nudged by tree-felling equipment to encourage any fauna to vacate the trees.</li> <li>- If no animal emerge from the hollows after shaking or nudging, then the tree will be felled and lowered to the ground if possible.</li> <li>- If an animal emerges from a hollow following shaking or nudging of the tree, then at least 30 minutes will be allowed for the animal to leave the tree. If the animal comes to the ground, or when it is on the lower trunk, attempts will be made to capture the animal using a net. Captured animals will be immediately transferred to a suitably sized cotton bag and checked for obvious injury during the transfer process.</li> <li>- Captured animals will be placed in individual bags unless they are a family group to which separation would risk the survival of the young.</li> <li>- Once the tree has been felled, a search will be made of the branches around the tree for any fleeing fauna and hollows should be inspected with a torch for the presence of any animals. Attempts will be made to capture any fleeing fauna with a net, and animals inside hollows should be extracted by hand. Captured animals will be immediately transferred to a suitably sized cotton bag and checked for obvious injury during the transfer process.</li> <li>- Injured, shocked or immature captured animals will be placed in a cotton bag secured at the top. Bags will be wrapped in appropriate insulating material such as blankets and placed in a quiet, warm and preferably dark place until the wildlife carer can collect them. Details on the location of the capture and proposed release areas will be provided to the wildlife carer.</li> <li>- Uninjured animals will be released in appropriate habitat as soon as practicable (at night for nocturnal species).</li> </ul> </li> </ul>	
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## BUSH FIRE MANAGEMENT

PLANNING	IMPLEMENTATION	
<i>Environmental Issue</i>	<i>Work Instruction/Management Measures</i>	<i>Responsibility</i>
<ul style="list-style-type: none"> <li>• Bushfire protection measures</li> </ul>	<ul style="list-style-type: none"> <li>• Any land falling within Stage 5 that forms part of an Asset Protection Zone (APZ) shall be constructed and maintained in accordance with all relevant approvals.</li> <li>• Ongoing under-scrubbing and vegetation thinning of the APZ required in order to reduce fuel loads.</li> <li>• No trees are to be removed without the consent of the NSW Rural Fire Service (RFS) or Council's environmental officers.</li> <li>• For any buildings proposed within the development parcels (i), (ii) and (iii) an appropriate construction level required as per the provisions of AS3959-1999 will be employed in the detailed design, with appropriate bush fire asset protection zones protecting development. The NSW Rural Fire Service will be consulted when preparing the Construction Certificate.</li> <li>• In the vicinity of any development in the parcels described above, ensure the use of fire resistant species of vegetation; employ a minimum of mulch and make maximum use of lawn areas and/or hard landscaped surfaces.</li> <li>• The installation of relevant infrastructure as required, including inline hydrants, for any development within development parcels (i),(ii) and (iii).</li> </ul>	<ul style="list-style-type: none"> <li>• Project Manager &amp; relevant Contractor, Owner(s)</li> </ul>
<ul style="list-style-type: none"> <li>• Tree removal</li> </ul>	<ul style="list-style-type: none"> <li>• Council's environmental officers, in the first instance, and the Project Manager, in the second instance, must approve the removal of any trees from the site that are outside the works area.</li> <li>• Trees in "no go" zones must be clearly fenced off for protection.</li> <li>• Access restricted to other parts of development lands not approved for development and associated uses.</li> <li>• Asset Protection Zones are to be landscaped in a manner in accordance with the recommendations above and shall include (but not be limited to) retention of nominated existing trees and new planting.</li> </ul>	Project Manager & relevant Contractor

## CONSTRUCTION MANAGEMENT

PLANNING	IMPLEMENTATION	
<i>Environmental Issue</i>	<i>Work Instruction/Management Measures</i>	<i>Responsibility</i>
<ul style="list-style-type: none"> <li>• Construction management, education of on site workers</li> </ul>	<ul style="list-style-type: none"> <li>• Prior to commencement of construction of any works within the Stage 5 area, a Construction Management Plan will be required, for approval by Shoalhaven City Council. The detailed plan shall include provisions relating but not limited to education of workers in approvals issued &amp; ongoing compliance- including protection of Aboriginal archaeological sites, protection of flora and fauna, sediment and erosion control, construction of water detention devices, construction of fire trails and drainage works generally, and clearing of vegetation.</li> </ul>	<ul style="list-style-type: none"> <li>• Owner, Project Manager, Contractor</li> </ul>
<ul style="list-style-type: none"> <li>• Construction sheds etc. storage</li> </ul>	<ul style="list-style-type: none"> <li>• All construction materials, sheds, skip bins and waste containers, temporary water closets, spoil, etc, shall be kept within the property and should be located away from any drainage lines and excluded from drip zones of trees that are to be retained. Vehicles and machines left on site overnight to be stored in the designated compound.</li> </ul>	<ul style="list-style-type: none"> <li>• Contractor</li> </ul>
<ul style="list-style-type: none"> <li>• Maintenance of construction equipment</li> </ul>	<ul style="list-style-type: none"> <li>• All storage, preparation, use and disposal of fuels and oils to take place under appropriate supervision. Refuelling is to occur away from drainage lines or drip zones of trees. Maintenance of machinery on-site is to be minimised and completed offsite wherever possible.</li> <li>• Operating procedure for containing and cleaning up oil spills to be in place, and all staff will be trained in these procedures. Disposal of contaminated materials used in the clean up of a fuel/oil spill will be disposed of by a commercial waste contractor offsite. In the event of the storage of fuels and oils on the site appropriate bunding will be provided.</li> </ul>	<ul style="list-style-type: none"> <li>• Contractor</li> </ul>
<ul style="list-style-type: none"> <li>• Control of spoil, debris etc</li> </ul>	<ul style="list-style-type: none"> <li>• Topsoil, excavated material, construction &amp; landscaping supplies and on- site debris are to be stockpiled within the erosion containment boundary and shall not encroach upon any footpath, nature strip, natural area to be protected, or road/trail.</li> <li>• All spills are to be cleaned up immediately</li> </ul>	<ul style="list-style-type: none"> <li>• Contractor</li> </ul>
<ul style="list-style-type: none"> <li>• Excavated materials</li> </ul>	<ul style="list-style-type: none"> <li>• All excavated material to be stockpiled on site prior to use as fill or for disposal. Material disposed off site to exit site via the shakedown pad. Any material deposited on public roads is to be immediately removed, either manually or by mechanical means. Hose down residual spoil to ensure road is thoroughly clean.</li> </ul>	<ul style="list-style-type: none"> <li>• Contractor</li> </ul>



## CULTURAL SITES MANAGEMENT

PLANNING	IMPLEMENTATION	
<i>Environmental Issue</i>	<i>Work Instruction/Management Measures</i>	<i>Responsibility</i>
<ul style="list-style-type: none"> <li>• To meet legal requirements and community expectations for the appropriate management of potential archaeological sites and surrounds</li> </ul>	<ul style="list-style-type: none"> <li>• Owners to undertake training education for all staff, new staff, contractors and consultants in the identification and significance of cultural heritage resources and the legislative requirements for their protection in New South Wales.</li> <li>• Regular monitoring of construction staff's familiarity with procedures relating to archaeological finds.</li> <li>• Should any previously unrecorded Aboriginal sites or objects are detected during the course of carrying out works within Stage 5 work must immediately stop and they must immediately report to NSW Department of Climate Change and seek advice as to the appropriate course of action to take.</li> <li>• All works to be designed and managed such that there is no alteration to drainage patterns that might adversely affect potential archaeological sites, or any other sites found.</li> <li>• Native flora-particularly resource plants used by the Aboriginal people- to be planted out in any bushland rehabilitation work. Refer to flora and fauna assessment report by Bushfire and Environmental Services regarding species and protocols to be followed.</li> </ul>	<ul style="list-style-type: none"> <li>• Relevant Project Manager, Contractor, Owners, NSW Department of Climate Change</li> </ul>