

1. BACKGROUND

- 1.1. These technical specifications will assist proponents to address issues relating to analysis of impacted flora and fauna, strategies for preservation, protection and restoration of vegetation and a proposal for the management and monitoring of vegetation over the long term.

2. PERFORMANCE CRITERIA

- 2.1. The performance criterion for this Technical Specification is that the information submitted to Council is enough for officers to make an informed decision regarding the impact to Threatened Species of the development proposal.

3. DEFINITIONS

- 3.1. Hold point: A defined position in the construction stages beyond which work shall not proceed without mandatory verification and acceptance by Council.
- 3.2. Witness Point: A nominated position in the construction stages where the option of attendance may be exercised by Council, after notification of the requirement.

4. MANAGEMENT REQUIREMENTS

4.1 Vegetation Management Plans (VMP)

Where a VMP is required or submitted it must contain details listed in sections 4.2, 4.3, 4.4 and 4.5. Details must be given of the proposed rehabilitation including, but not limited to: species to be planted, density, establishment period, maintenance details, weed control techniques for primary and secondary weeding, and monitoring timeframes.

Areas to be rehabilitated should be highlighted on a map contained in the vegetation management plan and the vegetation analysis plans. Any native species will be restricted to endemic plants, regenerated using local topsoil and locally collected seed stock will be required.

Monitoring targets shall be set for percentage cover of each vegetation stratum and for weeds.

4.2 Vegetation Analysis Plan

A Vegetation Analysis Plan, which describes the existing vegetation including location on a plan. The vegetation analysis plan will include:-

- A map with a scale of 1:100 for sites up to 1 hectare and 10 metre intervals and a scale of 1:200 for sites of more than 1 hectare.
- The area to be cleared in square metres and or number of trees to be removed is to be depicted on a map
- Existing vegetation will be clearly shown and labelled. All vegetation communities identified will be consistent with Lower Hunter Regional Environment Management Strategy or subsequent revisions.
- Vulnerable Ecological Communities, known vegetation corridors, and wetlands are to be mapped and depicted
- Groups of trees and vegetation communities within 20 metres of the site boundaries and the location of trees whose canopy overhang the site boundaries

- Trees and vegetation to be retained, including the purposes of such retention such as natural open spaces, buffer and exclusion zones, vegetation corridors, filter vegetation, protection and or riparian strips.
- Trees with corresponding numbers for the tree assessment schedule
- Details for protecting remnant trees and vegetation from damage during clearing works construction and on completion. This should include site preparation and location of protective fences. All information must be in accordance with Australian Standards 4970 Protection Of Tree On Development Site 2009.
- Details and locations of Asset Protection Zones.
- The rationale for land clearing – For what purpose is the cleared land to be used for.
- Details of the site Layout (Concept Plan) including location of future buildings, storage areas, drainage controls, pollution controls and surface treatments infrastructure and internal fences.
- Where a Tree Assessment Schedule is required by Council it must be prepared by a suitable qualified person and display the following:
 - Tree number
 - Scientific name
 - Common name
 - Useful Life Expectancy (ULE) values
 - Age class
 - Significance
 - Comments
 - Habitat Tree Hollow Assessment
 - Recommendation

The mapped vegetation data from the Vegetation Analysis Plan is to be provided to Port Stephens Council in an electronic format compatible with Councils GIS system and include a license for its future use.

4.3 Clearing Considerations

Council will not permit any clearing to be considered to be carried out as an activity in itself for an unspecified end-use. Clearing will only be allowed where it is necessary to enable a land use permitted on the land.

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

- The objectives of the land use zone(s) applying to the land.
- Whether any specimen present is listed in Council's Significant Tree Register. If so, what measures are needed for their conservation, including on-site protection and or removal during and after construction and/or the taking of plant material for propagation.
- Consistency in relation to Port Stephens Comprehensive Koala Plan of Management.
- The condition, maturity and useful life expectancy of remnant trees and native vegetation to be retained.
- Impacts on the scenic and visual amenity.

- Effects on natural ecosystems, fauna, fauna habitats and whether fauna needs protection or, if appropriate, relocation. An Assessment of Significance under section 5A of the EP&A Act may be requested.
- The need for bushfire hazard reduction and the effects of this on remaining vegetation. This includes hazard reduction on adjoining land.
- Whether permanent mitigation measures (such as bund walls, catch drains, swales and settling ponds) to contain nutrient and sediment flows and minimise weed dispersal need to be installed eg. in non-urban zones or on sites adjoining remnant bushland or semi-natural open spaces.
- Whether the proposed means of clearing is appropriate with respect to soil type, species of understorey or tree to be retained.
- The adequacy and appropriateness of erosion and sediment controls during and after construction. In this regard, turf grasses are generally unsuitable in conservation zones particularly along or near watercourses and remnant bushland.
- Edge effects on neighbouring vegetation, including, but not limited to, light wash.
- Impacts on wildlife corridors
- Any relevant Key Threatening Processes as listed under the Threatened Species Conservation Act 1995.
- The suitability of any submitted Vegetation Management Plan.
- The need to retain vegetation by providing:
 - Buffer zones as screening to roads or for the protection of identified core habitats, koala habitat buffer area, wetlands, littoral rainforests;
 - Filter and protection strips to natural drainage lines, watercourses, streams, foreshores of constructed drainage corridors;
 - Riparian habitat strips;
 - Exclusion zones for preserving vulnerable and/or significant remnant vegetation and species.
- The need to install temporary tree/vegetation protection measures prior to clearing works.
- Whether the proposed method for the disposing of cleared material is appropriate. All millable timber should be retrieved. Recycling of waste vegetation as chip or grinding is mandatory. The use of woodchip, topsoil and tub grindings for on site mulching or seedbank regeneration is preferred.
- The need for periodic or full time supervision of clearing works to protect environmental values.
- The need to rehabilitate any tree or vegetation adversely affected by clearing or construction works.
- The need to select and plant new trees as replacement for trees cleared.
- The effect of the development on the viability and quality of the bushland and, in particular, the likelihood of soil erosion, siltation of streams, wetlands and other water bodies, direct or indirect alteration to drainage patterns and to regimes, the spread of weeds, undesirable and exotic species in the bushland, rubbish dumping and incursion by domestic or feral animals.
- The effectiveness of measures proposed to mitigate any identified adverse impacts.
- Any comment made by a public authority,

- Whether the vegetation is affected by the provisions of any other Act, Regulation or State Environmental Planning Policy applying to the land.
- Whether the trees or vegetation is a significant component of the habitat of a species listed in schedule 1 or 2 of the Threatened Species Conservation Act 1995 and whether there is a need to assess the significance of the works in accordance with section 5A of the Environmental Planning and Assessment Act 1979.
- Whether the vegetation plan has been prepared by a suitably qualified person.

4.4 Clearing Protocols

Clearing protocols apply to all works which involve the removal of native vegetation in the Port Stephens Local Government Area.

- The clearing of native vegetation on site shall not occur within key breeding periods of species identified on site.
- Felling techniques are to be sensitive to arboreal mammals and bird species identified on site. Sectional dismantling will be an option where habitat hollows are to be reused.
- The identification and marking of all habitat trees on site prior to removal.
- The underscrubbing of vegetation less than 3m in height will occur prior to tree removal
- The retention of habitat trees for a period of 3 nights after the removal of non habitat trees have been felled.
- Clearing must then be carried out moving from the fringe of the habitat trees towards the surrounding vegetation.
- Trees should be 'soft felled' and inspected immediately by a licensed wildlife carers or ecologist for displaced fauna which are to be relocated as close as possible to the development site.
- All trees must be left for a minimum of two nights prior to being moved to a stockpile to allow resident fauna to vacate tree hollows.
- The removal of hollows/nesting sites from felled trees and the re-establishment as per the Port Stephens Council Nest Box Technical Specification.
- The felling of trees away from any joining retained habitats.

4.5 Clearing Method Statement

Where a Clearing Method Statement (CMS) is requested this will include details on:

- Size and type of any machinery to be used
- Under scrubbing – this work should be carried out to minimise the establishment of degradation processes and leave a layer of mulch to aid in soil retention in the event of adverse weather
- Disposal - Proposed means for disposal of cleared materials in this regard the sale of millable timber, chipping or tub grinding of plant materials for reuse on site as mulch to rehabilitate retained.
- Millable timber - Proposed means of timber to be jinked offsite and any certification required
- Timing of proposed works – Works will not occur during key breeding season of fauna species identified on site
- Transplanting and the rescue of appropriate species
- Seed bank should be utilised to revegetate on and off site

- Habitat Tree Hollow Assessment – compliant with the Port Stephens Council Nest Box Technical Specification
- Staggered clearing
- Personnel - Prior and during the removal of habitat trees, licensed wildlife carers or consultants shall be employed on site by the proponent to undertake the removal and relocation of fauna species

4.6 Vegetation Offsets

This section sets out guidelines for Offsets when required or are proposed as a mitigation measure for development impacting upon species and their habitats. This section applies to all development in the Port Stephens Local Government Area.

The following guidelines and information:

- Provides a council standard for offset assessment and calculation when proposed as a mitigation measure for development.
- Ensures that habitat and species offsets are commensurate with the habitat and species loss.
- Provides a consistent approach for determining offset requirements on a development site in order to offset its impacts.

Where offsets are proposed or required:

- The offset assessment must be carried out by a qualified ecologist.
- The assessment of the impacted lands must be carried out using Biobanking Assessment Methodology prepared by the Department of Environment and Climate Change, July 2008, or subsequent revisions or alternately seek to meet the offsetting principles identified in the 'Principles for the Use of Biodiversity Offset in NSW' document which is part of the 'Guidelines for Biodiversity Certification of Environmental Planning Instruments'.
- Calculations of Offsets must be carried out in accordance with Biobanking Assessment Methodology prepared by the Department of Environment and Climate Change, July 2008 or subsequent revisions or alternately seek to meet the offsetting principles identified in the 'Principles for the Use of Biodiversity Offset in NSW' document which is part of the 'Guidelines for Biodiversity Certification of Environmental Planning Instruments'.
- The applicant must demonstrate an effort to obtain like for like offset lands. In the occasion that like for like offsets cannot be achieved non like for like offsets will be assessed by Council on its individual merit.
- Where possible offset lands should be located adjacent to NSW National Parks in the Local Government Area.
- Offset lands adjacent to National Parks should be offered as a dedication to the National Parks and Wildlife Service NSW.
- Where offset lands adjacent to National Parks are not possible, or the land is not accepted by the National Parks and Wildlife Service NSW a management plan detailing the conservation mechanisms for long term care of the land must be developed. Conservation methods may be in the form of a Voluntary Planning Agreement, formal Bio banking legislation agreements, Voluntary Conservation Agreements, Property Vegetation Plans etc.

5. MAINTENANCE AND MONITORING REQUIREMENTS

- 5.1. Monitoring observations will be recorded in a report format and submitted in digital format. The report should include details and evidence of actions.