

2 Vegetation Assessment

The vegetation in and around the Development Estate boundaries, to a distance of 140m, has been assessed in accordance with PBP 2006. This assessment has been made via a combination of aerial photo interpretation and ground truthing exercises. Refer to Figure 2-1.

Vegetation Community classification have been undertaken across the Development Estate and within 140m of the Development Estate by RPS. The vegetation communities were delineated using the following regional vegetation community mapping packages

- Lower Hunter and Central Coast Regional Biodiversity Strategy (NPWS 2000; House 2002); and
- The Natural Vegetation of the Wyong Local Government Area (Bell, 2002).

Three vegetation communities were identified within the Development Estate and within 140m of the Development Estate as follows;

1. Coastal Sheltered Apple - Peppermint Forest
2. Swamp Oak - Rushland Forest
3. Swamp Mahogany - Paperbark Swamp Forest

These vegetation communities have been classified for bushfire purposes into structure and formation using the system adopted by Keith (2004) and using Table A2.1 within PBP (RFS, 2006). Refer to Table 2-1 overleaf. The vegetation type adjacent to the proposed Development Estate in all directions is Open Forest (Refer to Figure 2-1).

Note: For the purposes of this BTA, it has been assumed that vegetation within the Development Estate will be removed or managed as an APZ (with the exception of drainage lines / creeklines) as per the Concept Plan (Figure 1-3). The retained vegetation within the drainage lines / creeklines has been classified as Rainforest vegetation in accordance with page 52 of PBP 2006. PBP 2006 states that:

Refer to Appendix 2 for examples of Vegetation Formations.

'Riparian areas are those areas in width which are no greater than 20 metres in width and are found on either bank of a river, creek or stream identified on a BFPLM, and are treated the same as rainforest'.

Table 2-1: Vegetation Classification

Vegetation Community	Classification of Vegetation Formations
Coastal Sheltered Apple - Peppermint Forest	Dry Sclerophyll Forests (Open Forest)
Swamp Oak - Rushland Forest	Dry Sclerophyll Forests (Open Forest) - Subject to periodic inundation, however this community may remain dry for extended periods during which fuel loads will accumulate.
Swamp Mahogany - Paperbark Swamp Forest	Dry Sclerophyll Forests (Open Forest) - Subject to periodic inundation, however this community may remain dry for extended periods during which fuel loads will accumulate.
Retained Drainage Vegetation within the Development Estate	Riparian Vegetation (Rainforest) Retained vegetation within the site associated with the drainage line with a width of no greater than 20m

WARNING
No part of this plan should be used for critical design dimensions. Confirmation of critical positions should be obtained from RPS Newcastle.

Note that this Vegetation Community Map depicts clearly defined boundaries between vegetation communities that are the product of individual interpretation and are not distinguished by clearly defined boundaries 'on the ground'. Therefore, this map should only be treated as an indication of approximate peripheries between delineated vegetation communities.

Caution should therefore be exercised when using this data for purposes requiring high levels of accuracy. Furthermore, no account for intergrading areas between delineated vegetation communities has been made.

LEGEND

Development Estate

140m Buffer

Open Forest

N



TITLE: FIGURE 2-1 VEGETATION MAP

LOCATION: NORDS WHARF

DATUM: DATUM
PROJECTION: MGA ZONE 56 (GDA 94)

DATE: 5/7/2010
PURPOSE: BTA REPORT FIGURE

LAYOUT REF: 24530-1 NW NEW TEMP FIG 2-1 VEGETATION MAP A-A3.WOR
VERSION (PLAN BY): A-A3 (E.G)

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CLIENT: COAL & ALLIED INDUSTRIES LTD
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3 Slope Assessment

In accordance with PBP (2006), an assessment of the slope throughout the development estate and for 100m around was undertaken to identify both the average slope and by identifying the maximum slopes present. These values help determine the level of gradient which will most significantly influence fire behaviour on the development estate. Refer to Figure 3-1.

3.1 Slope Classes

A Slope Class Map (Figure 3-1) has been produced for land within 140m of the proposed development estate. The Slope Class Map has been produced using five slope classes as follows:

- 0 - 2°;
- 2 – 3°;
- 3 – 4°;
- 4 – 6°; and
- 6°+.

Elevation across the Development Estate ranges from 44m AHD in the north-east corner of the Development Estate to 2m AHD in the west where the Development Estate adjoins the foreshore reserve of Lake Macquarie. The slope of vegetation surrounding the Development Estate to 140m is documented in the below Table 3 –1.

Table 3-1: Slope Class Assessment

Direction of vegetation from Development Estate	Slope classes
North	Flat
	Cross-slope
South	Flat
	Cross-slope
East	Upslope
West	Downslope (0 - 5°)