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**Preliminary Ecological Information: 600 Woodstock Avenue Glendenning, State Significant Development Project**

Dear Stewart,

It is our understanding that Charter Hall are seeking development consent for a Materials Recycling Facility (the 'project') at 600 Woodstock Avenue, Glendenning (the 'study area'). Charter Hall are currently in the process of requesting Secretary's Environment Assessment Requirements (SEARs) in preparation for the development to be assessed as a State Significant Development (SSD) under Part 4 Division 4.7 of the NSW *Environmental Planning and Assessment Act 1979*. SSD projects require the preparation of a Biodiversity Development Assessment Report (BDAR) to accompany a SSD application, unless a BDAR waiver is granted.

Our preliminary advice is provided in **Appendix A** and has been prepared based on desktop analysis and a field survey performed on 6 August 2021. Key ecological constraints identified within the study area include native vegetation in the form of Cumberland Plain Woodland (CPW), which is listed as a Critically Endangered Ecological Community under both NSW and Commonwealth Biodiversity Legislation. Native vegetation within the study area may also provide foraging habitat for threatened fauna species. Due to the presence of CPW within the study area, a BDAR waiver is not considered applicable for the project. The impacts of the development on biodiversity are therefore required to be assessed in a Biodiversity Development Assessment Report, which is to be submitted with the SSD application. Further details are provided in **Appendix A**.

If you have any questions, or require further clarification, please do not hesitate to contact me on (02) 9868 1933.

Yours sincerely,



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# APPENDIX A :

## Preliminary Ecological Information

## A.1. Background

Charter Hall are seeking development consent for a Materials Recycling Facility ('the project) at 600 Woodstock Avenue, Glendenning (Lot 67 DP 804292 (the 'study area'). Charter Hall are in the process of requesting Secretary's Environment Assessment Requirements (SEARs) in preparation for the development to be assessed as a State Significant Development (SSD) under Part 4 Division 4.7 of the NSW *Environmental Planning and Assessment Act 1979* (EP&A Act). SSD projects require the preparation of a Biodiversity Development Assessment Report (BDAR) unless a waiver is granted. The study area is not located within any of the Sydney Region Growth Centres and is not subject to active Biocertification under the State Environmental Planning Policy (Sydney Region Growth Centres) 2006.

The layout of the project is shown in **Figure 1**. Based on our review of the project layout, it appears that the majority of the study area is proposed to be impacted by the project.

### A.1.1. Assessment Requirements for State Significant Development

The project is classified as SSD under Clause 23 of Schedule 1 of State Environmental Planning Policy (State and Regional Development) 2011, as the proposal seeks consent for development for the purpose of resource recovery or recycling facilities that handle more than 100,000 tonnes per year of waste.

Section 7.9 of the NSW *Biodiversity Conservation Act 2016* (BC Act) requires all development applications for SSD to be accompanied by a BDAR unless both the Planning Agency Head and the Environment Agency Head determine that the proposed development is not likely to have any significant impact on biodiversity values.

The main steps in the biodiversity assessment process for SSD (if a waiver is not granted) are as follows:

1. The Planning Agency Head and the Environment Agency Head determines if the Biodiversity Offsets Scheme applies to the State Significant Development and specifies the environmental assessment requirements;
2. The proponent engages an accredited person to assess the development site using the Biodiversity Assessment Method (BAM) and a BDAR is prepared;
3. The approval authority considers any serious and irreversible impacts and determines whether there are additional and appropriate measures to minimise impacts;
4. The approval authority sets an offset obligation as part of the Conditions of Approval; and
5. The proponent meets their offset obligation and begins their development.

The Biodiversity Assessment Method (BAM) sets out clear and repeatable methods to conduct assessment of direct and indirect impacts. The BAM is supported by the BAM Calculator, which is a web-based tool that quantifies direct impacts using 'biodiversity credits'. Two types of credits are generated by the BAM Calculator, ecosystem credits and species credits. Ecosystem credits are calculated based on variables including landscape features, native vegetation and ecosystem credit species (species that are reliably predicted by habitat surrogates). Species credits are calculated based on the number of individuals (flora) or the area of habitat (fauna) of species credit species (species that are not reliably predicted by habitat surrogates).

The BAM includes a requirement to prepare a BDAR for the development site. The BDAR must be prepared by an accredited assessor. A proponent is required to submit the BDAR as part of an Environmental Impact Statement for a State Significant Development.

### **A.1.2. Waiver of requirement to prepare a Biodiversity Development Assessment Report**

Section 7.9 of the BC Act indicates that there are some circumstances in which the Planning Agency Head and the Environment Agency Head will determine that a proposed development is not likely to have a significant impact on biodiversity values and as such, a BDAR is not required to be prepared. Biodiversity values are defined under the BC Act and the *Biodiversity Conservation Regulation 2017* (BC Regulation), and include:

- Vegetation integrity—being the degree to which the composition, structure and function of vegetation at a particular site and the surrounding landscape has been altered from a near natural state;
- Habitat suitability—being the degree to which the habitat needs of threatened species are present at a particular site;
- Threatened species abundance—being the occurrence and abundance of threatened species or threatened ecological communities, or their habitat, at a particular site;
- Vegetation abundance—being the occurrence and abundance of vegetation at a particular site;
- Habitat connectivity—being the degree to which a particular site connects different areas of habitat of threatened species to facilitate the movement of those species across their range;
- Threatened species movement—being the degree to which a particular site contributes to the movement of threatened species to maintain their lifecycle;
- Flight path integrity—being the degree to which the flight paths of protected animals over a particular site are free from interference;
- Water sustainability—being the degree to which water quality, water bodies and hydrological processes sustain threatened species and threatened ecological communities at a particular site.

For a waiver to be applied for future development at the study area, it needs to be demonstrated that the above listed biodiversity values will not be significantly impacted.

Furthermore, the NSW Department of Planning, Industry and Environment (DPIE) has provided guidance as to the nature of projects where a BAM waiver can be issued. This information has been reproduced below:

*"For the purpose of deciding whether the requirement for a BDAR can be waived, a proposed development could be considered as unlikely to have any significant impact on biodiversity values if it:*

- *Will not clear or remove native vegetation other than:*
  - *A few single trees with no native understorey in an urban context;*

- *Planted native vegetation that is not consistent with a Plant Community Type (PCT) known to occur in the same Interim Biogeographic Regionalisation of Australia (IBRA) subregion (e.g. street trees, trees in carparks, landscaping).*
- *Will have negligible adverse impacts on threatened species or ecological communities, considering habitat suitability, abundance and occurrence, habitat connectivity, movement and water sustainability including consideration of any non-natural features, non-native vegetation and human-built structures; or*
- *Will have negligible adverse impacts on protected animals because of impacts to flight path integrity.*

*Where there is reasonable doubt about potential impacts, or where information is not made available to the Department, a BDAR will be required. If a BDAR waiver is not granted, there is no appeal mechanism and a BDAR must be submitted with the SSD/SSI environmental impact assessment (EIS)."*

## A.2. Methodology

### A.2.1. GIS Mapping

A desktop analysis was completed to identify whether any vegetation communities were likely to be present on or nearby the study area. To do this, the study area was plotted against the broad scale mapping compiled by the NSW Parks and Wildlife Service (2013) for the Cumberland Plain, Western Sydney. A vegetation map of the study area was then produced based upon observations of vegetation during the site inspection.

### A.2.2. Site Inspection

Botanists Rohan Mellick and John Foster of Cumberland Ecology visited the study area on 6 August 2021. The study area was inspected by traversing the subject land to verify existing vegetation mapping with reference to threatened ecological communities (TECs) known to occur within the locality.

#### A.2.2.1. Random Meander Surveys

A random meander survey was undertaken within the study area where occurring flora species were recorded. Notes and photographs were taken documenting vegetation and habitat features throughout the study area.

#### A.2.2.2. BAM Plot Survey

Sampling of BAM plots included the establishment of one 20 m x 50 m plot within which data was collected to assess the vegetation integrity and habitat suitability. This survey included collection of the following data:

- Composition for each growth form group by counting the number of native plant species recorded for each growth form group within a 20 m x 20 m plot;
- Structure of each growth form group as the sum of all the individual projected foliage cover estimates of all native plant species recorded within each growth form group within a 20 m x 20m plot;
- Cover of High Threat Exotic weed species;
- Assessment of function attributes within a 20 m x 50 m plot, including:
  - Count of number of large trees;

- Tree stem size classes, measured as 'diameter at breast height over bark' (DBH);
- Regeneration based on the presence of living trees with stems <5cm DBH; and
- The total length in metres of fallen logs over 10 cm in diameter.
- Assessment of litter cover within five 1 m x 1 m plots evenly spread within the 20 m x 50 m plot; and
- Number of trees with hollows that are visible from the ground within the 20 m x 50 m plot.

Flora species recorded in each BAM plot and their projected foliage cover are listed in **Appendix B**.

#### **A.2.2.3. Fauna Habitat Assessment**

A fauna habitat assessment was conducted within the study area, which included consideration of important indicators of habitat condition and complexity including the occurrence of microhabitats such as tree hollows, human-made structures and the nature and extent of the understorey, ground stratum and canopy of vegetation. Any incidental vertebrate fauna species that were heard calling or were observed during the surveys were recorded and listed in the total species list for the subject land.

### **A.3. Key Findings**

#### **A.3.1. Vegetation Communities**

Four vegetation communities or other map units were identified within the study area and are described briefly below and shown on **Figure 2**. Native vegetation within the study area may also provide foraging habitat for threatened fauna species.

##### **A.3.1.1. Cumberland Plain Woodland**

This community is present as small patches of native woody vegetation along the boundaries of the study area that are consistent with the Cumberland Plain Woodland in the Sydney Basin Bioregion (CPW) Threatened Ecological Community (TEC). CPW is listed as critically endangered (CEEC) under the BC Act and the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The canopy layer of the CPW within the study area is dominated by *Eucalyptus moluccana* (Grey Box) and *Eucalyptus crebra* (Narrow-leaved Ironbark) whilst the understorey contains several characteristic species including *Bursaria spinosa* (Blackthorn), *Eriochloa pseudoacrotricha* (Early Spring Grass), *Pultenaea microphylla* and *Asperula conferta* (Common Woodruff).

##### **A.3.1.2. Planted Native Vegetation**

The study area contains scattered occurrences of planted native vegetation comprised of commonly planted species and cultivars such as *Grevillea 'Robyn Gordon'* and *Callistemon viminalis* (Weeping Bottlebrush).

##### **A.3.1.3. Exotic Vegetation**

Exotic vegetation occurs throughout the study area comprised of trees such as *Jacaranda mimosifolia* (Jacaranda) and understorey plants such as *Agave americana* (Century Plant) and *Clivia miniata* (Natal Lily).

#### **A.3.1.4. Cleared Land**

The study area contains previously cleared areas now occupied by existing hardstand areas and extant buildings.

### **A.3.2. Future Assessment Requirements**

#### **A.3.2.1. BAM Waiver Eligibility**

In accordance with the guidelines reproduced in **Section A.1.2** the project in its current form is not likely to be eligible for a waiver of requirement to prepare a BDAR. This is due to the presence of CPW within the study area, the majority of which is proposed to be impacted within the subject land. The CPW vegetation within the study area is consistent with a PCT known to occur in the same Interim Biogeographic Regionalisation of Australia (IBRA) subregion. Additionally, as CPW is listed as a CEEC under the EPBC Act and the BC Act, the project has a greater than negligible impact on a threatened ecological community. Subsequently, the impacts of the project must be assessed under the Biodiversity Offsets Scheme (BOS) with the preparation of a BDAR which will accompany the SSD application.

#### **A.3.2.2. BC Act Requirements**

Assessment under the BOS requires an assessment following the BAM by an accredited BAM assessor and the preparation of a BDAR. Field surveys to date have been undertaken in accordance with the BAM, however there may be a need for future targeted threatened species surveys. The project would also need to demonstrate that reasonable avoidance and mitigation measures have been implemented. The requirement for offsets is determined using the BAM and associated online BAM Calculator tool. The BAM calculations are used to quantify the credit offsetting liability for the development (if applicable).

Any one or a combination of the following options outlined within the *Biodiversity Conservation Regulation 2017* can be used to meet the offset obligations:

- The retirement of the required number and class of like-for-like biodiversity credits;
- The retirement of the required biodiversity credits in accordance with the variation rules;
- The funding of a biodiversity conservation action that would benefit the relevant threatened species or ecological community and that is equivalent to the cost of acquiring the required like-for-like biodiversity credits as determined by the offsets payment calculator; and
- The payment of an amount into the Biodiversity Conservation Fund determined in accordance with the offsets payment calculator to satisfy the requirement to retire biodiversity credits.

# FIGURES

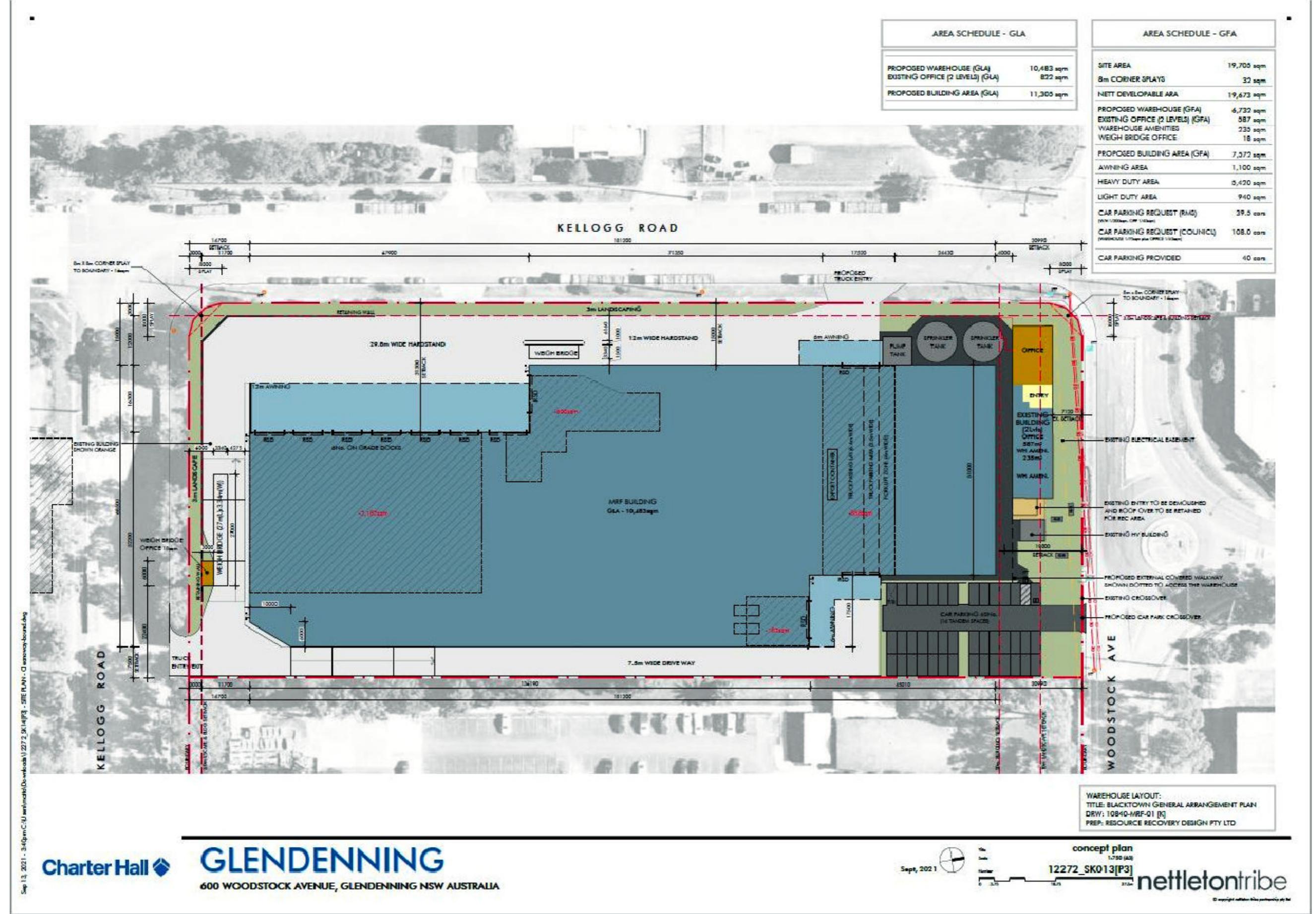


Figure 1. Layout of the project

Image Source: Nettletontribe (2021)



**Legend**

	Subject Land
	Study Area
	Canopy Overhang
<b>Vegetation Community</b>	
	Cumberland Plain Woodland
	Planted Native Vegetation
	Exotic Vegetation
	Cleared Land

Coordinate System: MGA Zone 56 (GDA 94)

Image Source:  
Image © Nearmap (2021)  
Dated: 26/01/2021

Figure 2. Vegetation Communities within the study area