

5 September 2014

Kim Shmuel Principal Planner JBA - Urban Development Services Level 7, 77 Berry Street North Sydney, NSW 2059

17-23 MERRIWA STREET, GORDON: ECOLOGICAL ADDENDUM LETTER TO SPECIES IMPACT STATEMENT

Dear Kim,

The purpose of this letter is to provide the results of additional ecological assessments conducted in relation to the removal of the Endangered Ecological Community (EEC) Sydney Turpentine Ironbark Forest (STIF), in the form of an individual *Eucalyptus paniculata* (Grey Ironbark) tree at 17-23 Merriwa Street, Gordon (hereafter referred to as the subject site).

As you are aware, personnel from Cumberland Ecology were present at the meeting between the Proponent, JBA Planning, Brewster Murray and Ku-ring-gai Council on 2 Sep 2014 and at the subsequent phone conference on 3 Sep 2014.

During the phone conference, Ku-ring-gai Council Ecologist, John Whyte, stated that proposed development could be considered to **not** result in a significant impact on the STIF EEC if further ecological assessments, determining the potential for cross-pollination of the individual tree within the subject site with other *Eucalyptus paniculata* individuals in the locality, were provided. Additional information on an increased offset package and vegetation management for the offsets was also required.

Cumberland Ecology conducted the requisite survey to determine the potential for cross-pollination on 4 Sep 2014. A qualified botanist conducted on-ground surveys of the subject site and surrounding areas to determine the presence of other *Eucalyptus paniculata* individuals in the locality. These surveys were limited to areas in Gordon on the western side of the Pacific Highway.

Several individuals of *Eucalyptus paniculata* were recorded during the survey and consisted of a mix of mature and juvenile trees in healthy condition. The locations of all recorded individuals are provided in **Figure 1**. **Photographs 1-3** below show the condition of three of the recorded individuals. The individuals largely occured

Cumberland Ecology PO Box 2474 Carlingford Court 2118 NSW Australia Telephone (02) 9868 1933 Mobile 0425 333 466 Facsimile (02) 9868 1977 Web: www.cumberlandecology.com.au

5 SEPTEMBER 2014

within or adjacent to areas mapped as STIF in the broad-scale mapping conducted for the Sydney Metropolitan Catchment Management Authority (SMCMA) Vegetation Mapping project (Figure 2).



Photograph 1 Grey Ironbark



Photograph 2 Grey Ironbark



3

Photograph 3 Grey Ironbark

CUMBERLAND ECOLOGY @ - 14029 - LET6.DOCX

5 SEPTEMBER 2014

CUMBERLAND ECOLOGY



Figure 1. Location of Eucalyptus paniculata individuals





400 m

N

All recorded individuals occurred within 1 km of the *Eucalyptus paniculata* individual present within the subject site. As a distance of 1 km is easily covered by common, urban, nectivorous avifauna such as Rainbow Lorikeets (*Trichoglossus haematodus*) and Noisy Miners (*Manorina melanocephala*), cross-pollination of the tree present on the subject site with other *Eucalyptus paniculata* individuals in the wider locality is entirely feasible, indicating that the individual present on the subject site is part of a larger population spread across the locality. Therefore, removal of the individual tree from the subject site will not result in local extinction of STIF.

Furthermore additional offset areas to those proposed in the Species Impact Statement (SIS) prepared for the development will be provided. The size and locations of additional areas to be added to the offset package as proposed in the SIS are provided in the supporting documentation provided by Brewster Murray.

The total proposed offset package consists of planting at least two *Eucalyptus paniculata* individuals to replace the individual being removed as part of the proposed development. Characteristic canopy, midstorey and understorey species of STIF, sourced from local species or seeds of local provenance, will also be planted as part of the regeneration of STIF within the subject site.

Ongoing maintenance of the vegetation and habitat within the proposed offset areas will be subject to a Vegetation Mangement Plan that will be prepared in accordance with any conditions of consent issued by Council. The Vegetation Management Plan will include a detailed plan for management of weeds, suitable timeframes for regular maintenance of weeds, a species list of suitable local native species for planting and best methods for establishment of planted species.

In summary, the additional ecological assessments conducted indicate that the individual tree to be removed is part of a larger local population of *Eucalyptus paniculata* as it is within range to cross-pollinated via common, urban avifauna. We therefore conclude that the removal of the individual tree from the subject site will not result in the local extinction of STIF, as the additional recorded trees occur within or adjacent to remnant patches of STIF. As outlined in the SIS, the minor short-term impacts from the loss of a tree will compensated for in the long-tern with the provision of a larger area of higher quality STIF with greater long-term security, maintaining the presence of STIF in the wider area and the locality.

Yours sincerely

Dane Robertson

Dr David Robertson Director david.robertson@cumberlandecology.com.au