

Appendix F

North Manyana Orchid survey, December 2012

16 December 2012

Kylor Pty Ltd

Re: North Manyana Orchid Surveys

Dear Sirs,

1 Background

This letter report has been prepared to accompany a preliminary planning study investigating the rezoning of North Manyana to allow for a residential subdivision. The planning study is being prepared for Kylor Investments Pty Ltd, the owners of the site.

An ecological assessment and survey was completed at the site to inform the planning study in September 2012 by EMM. The survey aimed to identify any sensitive ecological features that would be a potential constraint to future development of the site.

The site survey was undertaken outside of the flowering period for the Leafless Tongue-orchid (*Cryptostylis hunteriana*), which is known to occur nearby in Conjola National Park. Subsequently, additional surveys were required to determine if this species was present at the site, as it is not able to be detected outside its flowering period. The current letter provides the results of the orchid surveys that were undertaken at the site.

1.1 The site

The site, comprising Part of Lot 106 in DP 755923 (Curvers Drive, Manyana) and Part of Lot 2 in DP 836591 (Curvers Drive, Manyana), is located to the north of the small township of Manyana. It is bound by Inyadda Drive to the west, Sunset strip and Maple Street to the east, the rear of residential properties fronting Curvers Drive to the south, and undeveloped Crown Land to the north. The South Pacific Ocean is located to the east of Sunset Strip and Maple Street. The subject site is referred to herein as 'North Manyana'.

Originally cleared for farming between the 1950s and 1970s, the site has regrown with some areas containing dense shrublands and others with tall forests. The northern and western parts of the site were affected by bushfires in 2001. Trail motorbike enthusiasts have cleared and recontoured two large areas within the site without Kylor's approval. The only other visible development at the site is a transmission line easement, which runs along the eastern boundary of the site, and a grave belonging to the original grantees of the property.

2 Methods

Areas of suitable habitat at the site were targeted for the orchid surveys. Suitable habitat was considered to contain open woodland with a grassy understorey, where competition from other groundcovers was reduced. Targeted surveys included completing transects 5-10m apart in suitable habitat focusing on the ground cover. Random meanders were undertaken in other areas of the site that were considered to contain less suitable habitat for orchids. The location of the transects undertaken at the site are provided in Figure 1.

Targeted orchid surveys were undertaken on the 10 and 11 December 2012. Nearby known populations were checked to ensure that the surveys were undertaken during the known flowering period in the region.

3 Results

Orchids were identified in a number of locations throughout the site. In particular, members of the *Cryptostylis* genus were identified in various locations, usually just leaves and thus the species could not be determined. However, these were definitely not the listed Leafless Tongue-orchid due to the presence of the leaves. Flower stems were present on a few of these orchids, and these were positively identified as *Cryptostylis erectus*.

Cryptostylis orchids were identified mainly on the northern boundary and the north-western corner of the site in grassy woodland dominated by Sydney Peppermint (*Eucalyptus piperita*), Blackbutt (*E. pilularis*), Turpentine (*Syncarpia glomerifera*) and Bastard Mahogany (*E. botryoides x saligna*). Figure 1 shows the approximately location of the identified *Cryptostylis* species in the site. These areas will all be protected as part of the proposed rezoning.

Nearby known populations were identified in areas containing Scribbly Gum (*E. haemastoma*) and Red Bloodwood (*Corymbia gumifera*) and gravelly-sandy soils. While the site contains potential suitable habitat, it does not include these dominant canopy species which are associated with the species in the region.

Orchids identified at the site during the survey include:

- Bonnet Orchid (*Cryptostylis erecta*);
- Large Tongue Orchid (*Cryptostylis subulata*);
- Greenhood (*Pterostylis* spp.); and
- Hyacinth Orchid (*Dipodium variegatum*).

4 Conclusion

Given that the Leafless Tongue-orchid was not identified in the study area in suitable habitat during targeted surveys it is considered unlikely to occur. This is particularly the case as nearby known populations were in flower during the survey period and are all known to occur in habitat which is not found at the site.

Yours sincerely,



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Figure 1: Location of orchid survey transects and *Cryptostylis* spp. records