Appendix B

Flora and Fauna

EMGA | MitchellMcLennan

Flora and Fauna Assessment

Review of Environmental Factors

TransGrid Substation, Potts Hill Business Park

Prepared for Transgrid | March 2010

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Flora and Fauna Assessment

Review of Environmental Factors

H09001 \ Prepared for Transgrid \ March 2010

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Date		Date	13/04/10

The preparation of this report has been in accordance with the brief provided by the Client and has relied upon the data and results collected at or under the times and conditions specified in the report. All findings, conclusions or recommendations contained within the report are based only on the aforementioned circumstances.

Document Control

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Executive Summary

An assessment of the potential effects on flora and fauna from the proposed TransGrid Rookwood Road Substation at Potts Hill has been made, based on a combination of literature review, previous ecological assessments and field survey.

The site has been highly modified, and is cleared or dominated by weed species. Planted trees are present along the northern boundary. No native vegetation communities, threatened flora or hollow bearing trees are present. The majority of the vegetation with the exception of the planted trees along the northern boundary will be removed for the construction of the approved Civil Works Stage 1.

An assessment of likelihood of occurrence was undertaken for threatened and migratory species identified from database or other records, presence or absence of suitable habitat, features of the site, results of the field inspection and professional judgment. This assessment concluded that only five threatened species being the, Great Pipistrelle (*Falsistrellus tasmaniensis*), Eastern bent-wing bat (*Miniopterus schreibersii*), Eastern Freetail-bat (*Mormopterus norfolkensis*), Grey-headed flying fox (*pteropus poliocephalus*) and Yellow-bellied Sheathtail-bat (*Saccolaimus flaviventris*), have the potential to use the site for foraging. The potential foraging resource for these five bat species would be the planted trees along the northern boundary of the site.

A seven-part test under Section 5A of the *Environmental Planning and Assessment Act 1979* has been undertaken for the above five threatened bat species. The seven part test concluded that the proposal will not significantly impact on the status of the five threatened bat species or their habitat, as no clearing of vegetation will be necessary for the proposal. Vegetation will be removed as part of previous approvals within the site (Civil Works and Sydney Water Facilities). Landscaping within the site as part of the Sydney Water Facilities approval, will replace the minimal loss of foraging habitat for these highly mobile bat species.

In conclusion, it is considered that no significant impact on threatened flora and fauna species or Endangered Ecological Communities as listed under either the *NSW Threatened Species Conservation Act* 1995 or *Commonwealth Environmental Protection Biodiversity and Conservation Act* 1999 is likely to occur as a result of the proposal.

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1.0 INTRODUCTION

This Flora and Fauna Assessment presents an assessment of the impacts on flora and fauna from the proposed development of the TransGrid Rookwood Road Substation. As well as general flora and fauna issues, the report particularly addresses legislative requirements relating to flora and fauna especially:

- Effects on threatened species, populations and ecological communities, as listed under the *Threatened Species Conservation Act* (TSC Act), pursuant to Section 5A of the *Environmental Planning and Assessment Act 1979* (EPA Act);
- Likely impacts on matters of national environmental significance, as listed under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

In this report, the following terms are used to describe the particular geographical areas;

- **The Site** – that part of the site that is proposed for development, including land that may not actually be developed but has the potential to be indirectly affected.
- **Study Area** – The entire Potts Hill Reservoirs Site.

1.1 Brief Description of the Proposal

The proposal is for a 330kv substation to be developed on lot 101 of the Potts Hill Business Park.

A number of project applications have been lodged with the Department of Planning for the development of the land which is subject to this Flora and Fauna Assessment. These project applications and the status of each application is provided below:

- Concept Plan for Potts Hill Reservoir & Associated lands: Project Approval (07_0099) for a mixed use redevelopment (Residential, Commercial & Retail) of Sydney Water owned reservoirs site.
- Civil Works and Subdivision-employment lands: Project approval (MP08_0069) has been granted for demolition, bulk earthworks and subdivision within the employment lands to facilitate the new Sydney Water Facility and future development of the precinct.
- Sydney Water Facility: Project Approval (08_0049) has been granted for construction of new facilities for Sydney Water Corporation.

The approved civil works (MP08_0069) will result in the removal of all vegetation within the site, with the exception of the planted trees along the northern boundary.

This assessment has taken into account the determination of the above approvals within the site. The above approvals results in the total removal of vegetation within the site. As part of the SWF approval, landscaping of the site with indigenous native species is required.

2.0 ASSESSMENT APPROACH

The methodology used for the assessment of potential ecological impacts is as follows:

Preliminary Investigations

- Review of relevant literature and searches of ecological databases to determine the potential for threatened species, populations and ecological communities to occur in the local area.
- Analysis of which threatened species, populations and ecological communities may occur in the site.
- Assessment of the likely occurrence of threatened species based on previous studies, habitat on site, known distributions and professional opinion.
- Site inspection to obtain a broad understanding of the site characteristics, and in part, to assist with the threatened species assessment.
- Review of previous ecological studies over the Study Area and the site. Previous assessments include:
    - Ecological Assessment for Potts Hill Reservoir Site Part 3A Concept Plan report prepared for Landcom (Eco Logical Australia, May 2008).
    - Eco Logical Australia (2008) Potts Hill Sydney Water Facilities Ecological Assessment. Draft report for Sydney Water, June 2008.
    - Ecological Assessment for Potts Hill Reservoir Site Part 3A Concept Plan report prepared for Landcom (Eco Logical Australia, July 2008).
    - Draft Potts Hill Eastern Precinct, Bunker Road, Bagdad Street – Ecological Values (Ecological Australia, 7/07/2008).
- Review of previous approvals for the site.

Threatened Species Assessment

Determination of those threatened species, populations and ecological communities most likely to be affected by the proposal – this assessment pulls together information from the preliminary investigations to provide an evaluation of which threatened species, populations and ecological communities are likely to be affected by the proposal.

Evaluation

Assessment of potential effects of the proposal on flora and fauna, and identification of possible mitigation measures.

3.0 GENERAL FLORA AND FAUNA

3.1 Vegetation

Vegetation on the site is limited, with some planted trees in the north. Exotic grasses and weeds also occur in patches throughout the site.

No native vegetation communities occur within the site, the highly disturbed vegetation within the site is due to large quantities of fill, excavated during the construction of the reservoirs, being placed on the site.

Three vegetation communities recorded within the broader Potts Hill Site – Study Area (Cumberland Plain Woodland, Cooks River / Castlereagh Ironbark Forest and Sydney Turpentine Ironbark Forest) are listed as Endangered Ecological Communities (EECs) under the TSC Act, but are not found within the site. Sydney Turpentine Ironbark Forest occurs in the vicinity to the north of the site.

3.2 Fauna

The site area has minimal fauna habitat. Little vegetation is present, though planted trees provide limited foraging resources for mobile fauna such as birds and bats. No drainage lines are present. No hollow bearing trees are present. No corridor linkages are identified within the site.

4.0 LEGISLATIVE FRAMEWORK

This section provides a brief review of the legislation and policy framework relevant to the management and conservation of biodiversity on the site.

4.1 EPBC Act

The EPBC Act provides a national scheme for protecting the environment and conserving biodiversity values. Approval from the Commonwealth Environment Minister is required under the EPBC Act if the action (which can include a project, development undertaking or activity) will, or is likely to have a significant impact on matters considered to be of National Environmental Significance (NES matters). Refer to section 6.5 of this report for further information and assessment.

4.2 EP & A Act 1979

The EP&A Act forms the legal and policy platform for development assessment and approval in NSW and aims to, inter alia, 'encourage the proper management, development and conservation of natural and artificial resources'.

Projects proposed to be undertaken by a public authority with environmental impacts are assessed under Part 5 of the EP&A Act. The proposed 'activity' is to be determined by TransGrid under Part 5 of the Act, with an REF to assist in the determination.

4.3 TSC Act

The TSC Act aims to protect and encourage the recovery of threatened species, populations and communities listed under the Act. No EEC, and no threatened species listed under the TSC Act are known to occur on the site, though some threatened fauna species may potentially utilise the site. Potential impacts on these threatened species have been addressed in section 6.2 of this report.

4.4 Bankstown Local Environmental Plan

The Bankstown local environmental plan (LEP) is the principal planning document for the Bankstown Local Government Area. The LEP identifies a variety of landuse zones with details of objectives and permissible actions with the different zones.

4.5 Bankstown Biodiversity Strategy

This Biodiversity Strategy incorporates a detailed review of the natural environment of Bankstown LGA, threats to the existing biodiversity values, and statutory and organisational context relevant to the biodiversity management.

A list of strategies is provided for biodiversity management in the LGA, covering the areas of planning, ecological corridors, ground reserve management, education participation and many others. The objectives of the Strategy will be addressed through the Threatened Species Analysis in Section 5 of this report.

5.0 THREATENED SPECIES ANALYSIS

5.1 Background

Previous Ecological Assessments undertaken for Potts Hill Reservoir Part 3A Concept Plan (Eco Logical Australia, May and July 2008), have mapped and classified vegetation communities within the study area, including EECs, and highlighted the occurrence of threatened species, including *Acacia pubescens,* the Grey-headed Flying Fox and Common Bent-wing Bat.

The findings of the previous Ecological Assessments (Eco Logical Australia, May and July 2008), were summarised in a Draft document entitled Potts Hill Eastern Precinct, Bunker Road, Bagdad Street – Ecological Values (Eco Logical Australia, 7 July 2008). The following extract from the Ecological Values document is relevant to the site:

The site has been highly modified, and is cleared or dominated by weed species. Planted trees are present along the northern boundary. No native vegetation communities, threatened flora or hollow bearing trees are present.

Two highly mobile threatened species, the eastern bent-wing bat (Miniopterus schreibersii) and grey-headed flying fox (pteropus poliocephalus), have been recorded within the Potts Hill site, and may use planted trees within the site for foraging. Searches for the Cumberland Land Snail were conducted with no specimens located.

The approved works for the SWF (08_0049) will remove the planted trees within the site. The Director-Generals Assessment Report States for the SWF proposal:

The Ecological Assessment notes that vegetation on the Site is limited and that no native vegetation communities occur within the study area due to the highly disturbed character of the land. No endangered ecological communities have been found within the Sydney Water Facilities site. Likewise, the threatened plant, Acacia pubescens as well as the Cumberland Snail and Green and Golden Bell Frog were not found on site. While some planted trees that may provide foraging resources will be removed, it is anticipated that this will be replaced once the proposed landscaping has established, thus maintaining or improving the biodiversity of the site.

A site inspection was undertaken that confirmed that no EECs, threatened flora species or hollow bearing trees are present within the site.

It must be noted that approval has been given for Stage 1 Civil Works and approval has been given to the construction of the SWF. The construction of Stage 1 Civil Works will require the removal of all vegetation within the site with the exception of planted trees along the northern boundary of the site.

This ecological assessment has been based on the determination of the Civil Works and SWF approvals that will remove the vegetation within the site.

5.2 Local Significant Species and Populations

Searches of the NPWS Wildlife Atlas and EPBC Act MNES databases indicated 49 threatened species and two migratory species previously recorded in the vicinity of the Study Area (entire Potts Hill Study Area and 10km radius). An assessment of likely occurrence of threatened and migratory species was conducted from the database or other records, presence or absence of suitable habitat, features of the site, results of the field inspection and professional judgment. This assessment concluded that only five threatened species being the, Eastern bent-wing bat (*Miniopterus schreibersii*), Eastern Freetail-

bat (*Mormopterus norfolkensis*), Grey-headed flying fox (*pteropus poliocephalus*) and Yellow-bellied Sheathtail-bat (*Saccolaimus flaviventris*), have the potential to use the site for foraging. Of these species only two species have been recorded within the Study Area (Potts Hill), these being the Eastern bent-wing bat and Grey-headed flying fox.

5.3 Assessment Results

Of the threatened flora and fauna species previously recorded in the locality and based on the assessment of likelihood of occurrence only five highly mobile bat species as named above, are considered to have the potential to forage within the site. Refer to Section 6 of this report for Impact Assessment of the proposal on these species.

6.0 ASSESSMENT OF THE PROPOSAL

This section includes all assessments required under the provisions of all relevant legislation pertaining to the proposal. This includes assessment under the EP&A Act 1979 and TSC Act 1995.

6.1 Overview of Potential Impacts Associated with the Proposal

The site has been highly modified, and is cleared or dominated by weed species. Planted trees are present along the northern boundary. No native vegetation communities, threatened flora or hollow bearing trees are present. The majority of the vegetation with the exception of the planted trees along the northern boundary will be removed for the construction of Civil Works Stage 1. The approved SWF will remove the planted trees along the northern boundary of the site.

The Threatened Species Assessment, concluded that only five threatened bat species could potentially use the site for foraging. An assessment of the impact on these threatened species under the provisions of Section 5A of the TSC Act 1995 has been addressed below.

6.2 Threatened Species Assessment (Section 5A of the EP&A Act 1979)

The TSC Act was gazetted in late 1995 and aims to conserve threatened species, populations and ecological communities of animals and plants. Specific objectives of the Act are to:-

a) Conserve biological diversity and promote ecologically sustainable development;
b) Prevent the extinction and promote the recovery of threatened species, populations and ecological communities that are endangered;
c) Protect critical habitat of those threatened species, populations and ecological communities;
d) Eliminate or manage certain processes that threaten the survival or evolutionary development of those threatened species, populations and ecological communities;
e) Ensure that the impact of threatening actions are properly assessed; and
f) Encourage the conservation of threatened species, populations and ecological communities by the adoption of measures involving co-operative management.

Section 5A of the EP&A Act aims to improve the standard of consideration and protection afforded to threatened species, populations and communities and their habitats in the planning process. The outcome of any threatened species assessment should be that developments and activities are undertaken in an environmentally sensitive manner, and that appropriate measures are undertaken to minimise adverse effects on threatened species or their habitats.

Under the TSC Amendment Act 2002, Section 5A of the EP&A Act has been amended. This has also affected the TSC Act 1995 and the Fisheries Management Act 1994. An essential outcome of the amendments is that as of late 2005, the previous “eight-part test” has been replaced with a set of revised factors known as the “seven-part test”.

The basic intent of the revised factors remain the same, the main change in emphasis being more towards impacts and losses at the local rather than the regional level. Additionally, recovery planning and threat abatement planning is explicitly considered in one of the factors. As with the previous eight-part test, the seven-part test should not be treated as a “pass or fail’ test, but rather as a tool to assist in determining whether further assessment might need to be undertaken.

Determining authorities have an obligation under the EP&A Act to consider whether a proposal is likely to significantly affect threatened species, populations or ecological communities, or their habitat. In this regard, the determining authority must take into account the seven-part test.

A seven-part test for the threatened fauna that have the potential to forage on the site is presented in Section 6.3.2.

6.3 Threatened Species

6.3.1 Flora and Endangered Ecological Communities

A threatened plant, *Acacia pubescens*, is known to occur within the Potts Hill Reservoir site, but no plants were found within the site. The disturbed soil profile of the site means that the species is unlikely to be present in the soil seed bank. No threatened flora species or EECs need assessment.

6.3.2 Fauna

Targeted searches for the Cumberland Land Snail (*Meridolum corneovirens*) within the site did not result in any specimens or shells. The habitat within the site was considered to be poor with limited leaf litter and ground debris to provide shelter for this species (Eco Logical, 2008).

Five threatened species being the Great Pipistrelle (*Falsistrellus tasmaniensis*), Eastern bent-wing bat (*Miniopterus schreibersii*); Eastern Freetail-bat (*Mormopterus norfolkensis*), Grey-headed flying fox (*pteropus poliocephalus*) and Yellow-bellied Sheathtail-bat (*Saccolaimus flaviventris*) have the potential to forage within the site. Therefore, a seven-part test under Section 5A of the EP&A Act has been undertaken for these species and, is presented below.

The previous approvals within the site would remove foraging habitat for these species and therefore, no impact would occur to these species as a result of this proposal. However, a precautionary approach has been undertaken for the potential impact of the removal of these planted trees upon these threatened species.

a) In the case of a threatened species, whether the action proposed is likely to have an adverse affect on the life cycle of the species such that a viable local population of the species is likely to be placed at risk of extinction.

<u>Grey-headed Flying-Fox</u>

The site does not provide roosting habitat for this species. Grey-headed flying-foxes tend to congregate in areas where there is a concentration of Swamp Mahogany (*Eucalyptus robusta*) and Old Man Banksia (*Banksia serrata*), which are favoured food trees of the species. However, they will eat the pollen and nectar of other species of *Eucalyptus, Angophora* and *Corymbia* and therefore have the potential to feed in small numbers at night within the site.

The site has a relatively small amount of marginal foraging habitat for this species with the planted trees along the northern boundary of the site. These trees represent a negligible proportion of the available food trees for Grey-headed Flying-foxes in the Study Area, and they will not result in the limitation of food resources for this species, either at a local or broader geographical level. Also, given that this species is highly mobile, any loss of foraging habitat is unlikely to result in significant disturbance or displacement as the species is able to move to retained vegetation within the study area and in the vicinity of Potts Hill. In addition, landscaping within the site as part of the SWF approval, will replace the limited foraging habitat within the site.

Therefore, the proposal is unlikely to have an adverse effect on the life cycle of Grey-headed Flying-foxes such that a local population of this species is likely to be placed at extinction.

Great Pipistrelle, Eastern Bent-wing Bat, Eastern Freetail-bat, Yellow-bellied Sheathtail bat

The site does not provide roosting habitat for these species. The site offers a relatively small amount of foraging habitat for these species. This foraging habitat will be removed as part of the SWF approval and landscaping of the site is to be undertaken. In any case these species are highly mobile, and any loss of foraging habitat is unlikely to result in significant disturbance or displacement as the species are able to move to retained vegetation within the study area and in the vicinity of Potts Hill. Landscaping within the site as part of the SWF approval, will replace the limited foraging habitat within the site. The proposal will not result in the breeding cycle of this species being disrupted.

Therefore, the proposal is unlikely to have an adverse effect on the life cycle of the bat species such that a local population of these species is likely to be placed at extinction.

b) In the case of an endangered population, whether the action proposed is likely to have an adverse affect on the life cycle of the species that constitutes the endangered population such that a viable local population of the species is likely to be placed at risk of extinction.

Not Applicable. These bat species are threatened species rather than an endangered population.

c) In the case of an endangered ecological community or critically endangered ecological community, whether the action proposed:

(i) Is likely to have an adverse effect on the extent of the ecological community such that its local occurrence is likely to be placed at risk of extinction, or

(ii) Is likely to substantially and adversely modify the composition of the ecological community such that its local occurrence is likely to be placed at risk of extinction.

Not Applicable. These bat species are not an endangered or critically endangered ecological community.

d) In relation to the habitat of a threatened species, population or ecological community:

(i) The extent to which habitat is likely to be removed or modified as a result of the action proposed, and

(ii) Whether an area of habitat is likely to become fragmented or isolated from other areas of habitat as a result of the proposed action, and

(iii)The importance of the habitat to be removed, modified, fragmented or isolated in the long term survival of the species, population or ecological community in the locality.

Grey-headed Flying-fox

(i) The site contains planted trees along the northern boundary of the site. These trees would provide marginal foraging habitat for this species. However, as part of the SWF approval, landscaping is required that would replace the limited foraging habitat that has been removed.

(ii) The proposal would not result in the fragmentation or isolation of Grey-headed Flying-fox habitat. This species is highly mobile and therefore, any loss of foraging habitat is unlikely to result in a significant disturbance or displacement as the species is able to move to retained vegetation within the study area or to other remnant in

the vicinity of Potts Hill. This species does not require continuous canopy for their movement and between areas of habitat.

(iii) The planted trees to be removed as part of the SWF approval represent a negligible proportion of the available food trees for Grey-headed Flying-foxes in the Study Area, and their removal will not result in the limitation of food resources for this species, either at a local or geographical level.

Bat Species

(i) The site contains limited foraging habitat for these species, in the planted trees along the northern boundary of the site. However, as part of the SWF approval landscaping of the site is required to replace the foraging habitat that was removed by previous works.

(ii) The proposal would not result in the fragmentation or isolation for these Bat species. These species are highly mobile and therefore, any loss of foraging habitat is unlikely to result in a significant disturbance or displacement as these species are able to move to retained vegetation within the study area or to other remnant in the vicinity of Potts Hill. This species does not require continuous canopy for their movement and between areas of habitat. Also, as part of the approval for the SWF, that landscaping is required to replace the foraging habitat for these species that was removed for the proposed works.

(iii) The planted trees within the site (that may encourage foraging resources for the species) represent a negligible proportion of the available foraging habitat for these bat species within the Study Area, and their removal will not result in the limitation of food resources for these species, either at a local or geographical level. Also, landscaping as part of the SWF approval, will replace this foraging habitat for these species.

e) Whether the action proposed is likely to have an adverse effect on critical habitat (either directly or indirectly).

No areas of designated critical habitat have been identifies under the provisions of the TSC Act 1995 apply to the site.

f) Whether the action proposed is consistent with the objectives or actions of a recovery plan or threat abatement plan.

Grey-headed Flying-fox

The proposal is consistent with the priority actions for the recovery of the Grey-headed Flying-fox.

Bat Species

There is no evidence that a draft or Final Recovery Plan exists for these species.

g) Whether the action proposed constitutes or is part of a key threatening process or is likely to result in the operation of, or increased the impact of ,a key threatening process

Habitat clearance is considered a key threatening process for these species. However, the proposal will not result in the removal of native vegetation. Approval has been granted for the removal of vegetation within the site for Civil Works and the SWF. In the case that the planted trees are not removed prior the trees represent a negligible proportion of the available foraging resources for these

species, and their removal will not result in the limitation of food resources for these species, either at a local or broader geographical level. Once landscaping vegetation as proposed for the SWF is established, it is anticipated that this will replace the minimal loss of foraging habitat for highly mobile species.

6.4 Conclusion for the seven-part test for the threatened fauna species

The proposal will not significantly impact on the status of the threatened bat species or their habitat. No clearing of vegetation will be necessary for the proposal. Vegetation will be removed as part of previous approvals within the site (Civil Works and SWF). Landscaping within the site as part of the SWF approval, will replace the minimal loss of foraging habitat for these highly mobile bat species. Therefore, a Species Impact Statement is NOT required for these species in relation to the proposal.

6.5 Environment Protection & Biodiversity Conservation Act 1999

The EPBC Act was gazetted on the 16th July 2000 replacing several earlier Commonwealth statutes. This Act focuses Commonwealth interests on matters of national environmental significance (NES) including integrated biodiversity conservation and the management of important protected areas. The Act also establishes a streamlined environmental assessment and approvals process.

The matters of national environmental significance as identified in the Act which require assessment and approval to be addressed by the Commonwealth include:

- World Heritage properties
- National Heritage Places
- Ramsar wetlands
- Nationally threatened species and ecological communities (Part 13, Division 1, Subdivision A of the EPBC Act)
- Migratory species
- Commonwealth Marine areas
- Nuclear actions (including uranium mining)

The assessment and approval process applies to any action that has, will have or is likely to have a significant impact on a matter of national environmental significance. An 'action' is defined as a project, development, undertaking or an activity or series of activities.

Based on the assessment process, previous records in the locality and representation of habitat on the site, it is concluded that only one threatened fauna species as listed on the EPBC Act 1999 has any potential to occur on the site. This is the Grey-headed Flying-fox that is listed as Vulnerable under the Act. Under the Bilateral Agreement between the Commonwealth and NSW state Governments, the impact assessment processes in place under the NSW EP&A Act and NSW TSC Act are considered acceptable to the Commonwealth and no separate assessment is now required.

The site does not contain an area considered of national environmental significance and the NSW Threatened Species Assessment process involving the seven-part test has concluded that no significant impact is likely to occur to the Grey-headed Flying-fox. It is therefore considered that the specific assessment process under the Referral provisions of the EPBC Act 1999 is not required for the proposal.

7.0 CONCLUSION

An assessment of the potential effects on flora and fauna from the proposed substation at Potts Hill has been made, based on a combination of a literature review, review of previous ecological assessments and field survey. The resulting information has been used to address the requirements of Section 5A of the EP&A Act 1979.

An assessment of likelihood of occurrence was undertaken for threatened and migratory species identified from relevant databases or other records, presence or absence of suitable habitat, features of the site, results of the field inspection and professional judgment. This assessment concluded that only five threatened species being the, Great Pipistrelle (*Falsistrellus tasmaniensis)*, Eastern bent-wing bat (*Miniopterus schreibersii*), Eastern Freetail-bat (*Mormopterus norfolkensis*), Grey-headed flying fox (*pteropus poliocephalus*) and Yellow-bellied Sheathtail-bat (*Saccolaimus flaviventris*), have the potential to use the site for foraging. The potential foraging resource for these five bat species would be the planted trees along the northern boundary of the site.

The seven part test concluded that the proposal will not significantly impact on the status of the five threatened bat species or their habitat. No clearing of vegetation will be necessary for the proposal. Vegetation will be removed as part of previous approvals within the site (Civil Works and SWF). Landscaping within the site as part of the SWF approval, will only replace a minimal amount of foraging habitat for these highly mobile bat species.

No other threatened flora or fauna species or EECs listed under either the NSW TSC Act or Commonwealth EPBC Act are likely to be affected by the proposal.

8.0 MITIGATION

To ameliorate impacts of the proposal on the local natural environment, it is recommended that:

- No stormwater or drainage is to be directed towards, or into, the Sydney Turpentine Ironbark Forest (EEC) to the north of the Study Area; and
- Locally indigenous native species be utilised where possible as part of the proposed landscaping.

9.0 REFERENCES

Department of Environment and Conservation (NSW) and Department of Primary Industries (DEC & DPI) (2005). Draft Guidelines for Threatened Species Assessment. Dated July 2006.

Eco Logical Australia (2008) Ecological Values for Potts Hill Eastern Precinct, Bunker Road, Bagdad Street, July 2008.

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