Summary of key environmental and cultural features

Gerringong upgrade Princes Highway

JUNE 2010

Impact assessment

Impact assessments have determined that the proposed upgrade is unlikely to have a significant impact upon any endangered ecological communities; threatened flora, fauna or aquatic species; or aquatic environments.

Ecological features

Endangered ecological communities

Two threatened plant communities which form part of endangered ecological communities are found within the study area. These include:

Estuarine saltmarsh

- **Estuarine saltmarsh** is part of the Coastal Saltmarsh endangered ecological communities listed in the *Threatened Species Conservation Act, 1995*, which occurs in the NSW North Coast, Sydney Basin and South East Corner Bioregions.

Subtropical dry rainforest

- **Subtropical dry rainforest** is included within the Illawarra Subtropical Rainforest endangered ecological communities, which is confined to the Sydney Basin Bioregion.

Flora

Habitat potentially exists within the study area for the following threatened flora species:

- White-flowered Wax Plant, *Cynanchum elegans*.
- Illawarra Socketwood, *Daphnandra* sp. *'Illawarra'*.
- Illawarra Irene, *Irenepharsus trypherus*.
- *Solanum celatum.*
- Magenta Lily Pilly, *Syzygium paniculatum*.
- Illawarra Zieria, *Zieria granulate*.

Fauna

Habitat potentially exists within the study area for the following threatened fauna species:

- Rose-crowned Fruit-dove, *Ptilinopus regina*.
- Superb Fruit-dove, *Ptilinopus superbus*.
- Yellow-bellied Sheathtail Bat, *Saccolaimus flaviventris*.
- Eastern Freetail Bat, *Mormopterus norfolkensis*.
- Eastern False Pipistrelle, *Falsistrellus tasmaniensis*.
- Greater Broad-nosed Bat, *Scoteanax rueppellii*.

Aquatic ecology

Two freshwater fish species within the study area are listed as threatened:

- Macquarie perch, *Macquaria australasica*.
- Australian grayling, *Prototroctes maraena*.

Werri Lagoon and Crooked River estuary also constitute major fish habitat.

Table A: Cultural heritage issues

RENFREW PARK

Renfrew Park

'Renfrew Park', was originally a 600 acre grant to William Smith in 1821. In 1835, Robert Miller bought the land and called it Renfrew Park. The property extended from the sea to 'Alne Bank' and from 'Omega Retreat' to the township of Gerringong.

Much of it was swamp land, known for many years as Miller's Swamp, but the land was subsequently drained and cultivated.

FIG TREES AT ROSE VALLEY ROAD

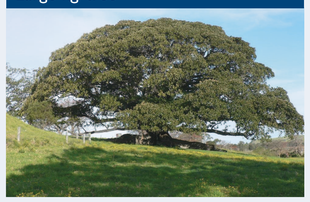
Fig trees

Several large, quite old Moreton Bay Fig trees (*Ficus macrophylla*) have been identified in the study area.

Two of these trees are long established, the "east Fig" is estimated to be 160+ years old. The "west Fig" is estimated to be 110+ years old.

Local Aboriginal people believe the trees to be as much as "1000 years old".

Large fig tree



Impacts

Following extensive investigation of design options AECOM and RTA have advised that the required footprint of the upgraded highway carriageways would necessitate either:

1. The removal of the larger fig tree on the west side of the highway or
2. The removal of the smaller of the two fig trees on the west side of the highway plus the removal of a strip section of the Renfrew Park homestead grounds including the fig tree near the southwestern corner of the grounds and the formal entrance posts and gate.

Given the various pros and cons of each alignment option and their consequential heritage impacts, the consultants are of the opinion that an alignment that conserves, at least the larger of, the two fig trees on the western side of the highway, and which as a consequence must impact the western portion of the Renfrew Park homestead grounds and plantings, is a justifiable management solution.

Mitigation

The following mitigation measures would be considered to ameliorate potential impacts on the cultural heritage values:

- Establish a management and impact mitigation program in consultation with the Aboriginal focus group.
- Propagate cuttings from the fig tree and make available to members of the local Aboriginal and non-Aboriginal community for use in private gardens and landholdings.
- Conduct an archival record of the front portion of the homestead grounds.
- Ensure that the palm tree in the grounds at the front of the Renfrew Park homestead remains undisturbed and viable.
- Develop and instigate, in consultation with the landowner and a heritage garden specialist, a landscaping plan for the remaining portion of the homestead front grounds. The objective of the plan would be to integrate the upgrade batter and easement requirements with the redevelopment of the homestead frontage. Subject to owner and Kiama Council heritage requirements, it is recommended that the plan seek to retain the palm tree, re-establish the formal and symmetrical garden schema, and reinstate the existing entrance posts and gateway along the central axis.
- The larger retained fig tree on the west side of the highway be integrated into any gateway statement/ installation for the Gerringong area.

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