# NEST BOX MANAGEMENT PLAN

## Warrell Creek to Urunga upgrade

**FEBRUARY 2013**

# WARRELL CREEK TO URUNGA:

## NEST BOX PLAN OF MANAGEMENT

FEBRUARY 2013

PREPARED FOR THE ROADS AND MARITIME SERVICES BY:

LEWIS ECOLOGICAL SURVEYS

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**……**


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…14th February 2013……
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## ACKNOWLEDGEMENTS


**Ben Lewis (LES)**: Field surveys and report author.

**Kristy Harvey (RMS)** – Project management and supply of background information.

**Brett Hoffman (RMS)** – Project management and logistics.

**Tim Gooley (RMS)** – Project management and review process.

**Belinda Bock (RMS)** – Project management and logistics.

**Craig Harre (EPA) –** Document review.


**Photography**: Ben Lewis T/A Lewis Ecological Surveys and Alan and Stacey Franks T/A Hollow Log Homes ©

Top Left– Hollow bearing tree number 285 from Burkes Lane area (section K).
Bottom Left to Right – Squirrel Gliders (*Petaurus norfolcensis*) inhabiting a nest box shortly after its installation in the Hunter Valley. Gould's Wattled Bat (*Chalinolobus gouldi*) a common inhabitant of the project study area, juvenile Sugar Glider (*Petaurus brevipes*).

**Report to be cited:** Lewis, B.D. (2013). Warrell Creek to Urunga: Nest Box Plan. Report prepared by Lewis Ecological Surveys © for Roads and Maritime Services.

## Revision History:

| Rev. | Project Number | Date | Description | Prepared By | Reviewed By |
|---|---|---|---|---|---|
| A | 2071112e | 7.5.2012 | Draft for comment | Ben Lewis (Lewis Ecological Surveys) | Craig Harre (EPA) |
| B | 2071112e | 19.6.2012 | Final | Ben Lewis (Lewis Ecological Surveys) | Kristy Harvey |
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## Distribution History:

| Rev. | Date | Issued To | Position | Name |
|---|---|---|---|---|
| A | 20.04.2012 | Roads and Maritime Services | Environmental Officer | Kristy Harvey |
| B | 18.06.2012 | Roads and Maritime Services with just EPA comments/review | Environmental Officer | Kristy Harvey |
| B | 20.06.2012[1] | Roads and Maritime Services with EPA and KH review | Environmental Officer | Kristy Harvey |
| C | 2.11.2012 | Roads and Maritime Services | Environmental Officer | Belinda Bock/Tim Gooley |
| D | 14.2.2013 | Roads and Maritime Services | Environmental Officer | Belinda Bock |

[1] Late submission from RMS on the 19.6.2012 after the final document was issued. Revision and distribution to remain at version B at that point in time.

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# 1.0 INTRODUCTION

## 1.1 Background

This Nest Box Plan of Management (NBPoM) forms part of the overall management of fauna for the Upgrading of the Pacific Highway to a four lane divided carriageway from the existing Allgomera deviation, south of Warrell Creek to the Waterfall Way, Raleigh by constructing the Warrell Creek to Urunga Upgrade (the Project). The primary objective of this plan is to implement nest boxes as a compensatory mechanism for the loss of den, roost and nest resources and thereby satisfying Minister Condition of Approval B6 "*prior to the commencement of any construction work that would result in the disturbance of any native vegetation (or as otherwise agreed to by the Director General), the Proponent shall in consultation with OEH prepare and submit for the approval of the Director General a Nest Box Plan to provide replacement hollows for displaced fauna consistent with the requirements of SoC F7. The plan shall detail the number and type of nest boxes to be installed which must be justified based on the number and type of hollows removed (based on detailed pre-construction surveys), the density of hollows in the area to be cleared and adjacent forest, and the availability of adjacent food resources. The plan shall also provide details of maintenance protocols for the nest boxes installed including responsibilities, timing and duration".*

Among those hollow dependant fauna previously recorded in the Warrell Creek to Urunga area are a number of threatened species including the Yellow-bellied Glider (*Petaurus australis*), Glossy Black Cockatoo (*Calyptorhynchus lathami*), Powerful Owl (*Ninox strenua*) and microchiropteran bats such as the Greater Broad-nosed Bat (*Scoteanax rueppellii*) and Eastern False Pipistrelle (*Falsistrellus tasmaniensis*). The project application report prepared by SKM (2010) highlighted a number of ecological impacts including but not limited to the loss of suitable and/or potential foraging habitat and hollow bearing trees (HBT's) which represent potential den, roost or nest sites for the species above.

## 1.2 Why Provide Nest Boxes

The removal of HBT's has the potential to impact upon the population processes of a species requiring tree hollows. For example, the removal of hollows can expose individuals to greater levels of predation, reduced reproductive success of that species and can increase inter-specific and intra-specific competition for resources (Carbery 2004). For these reasons, the removal of HBT's is currently listed as a key threatening process (KTP) pursuant to the *Threatened Species Conservation* Act (NSW Scientific Committee 2006). The provision of nest boxes can ameliorate these processes, and is the focus of increased research efforts (*see review in* Goldingay and Stevens 2009).

## 1.3 Structure of this Plan

This NBPoM identifies the fauna which are likely to utilise tree hollows along the construction/clearing footprint and provides an indication as to the number, type, location, installation heights, aspect and density of nest boxes required to compensate for this whilst addressing the implications of land tenure and maintenance considerations. As part of preparing this plan, a monitoring and maintenance program has also been developed to ensure that nest boxes are functioning appropriately and to assess their effectiveness over the life of this plan (2013-2017). For the purposes of this plan, the term effectiveness refers to whether or not the identified fauna groups outlined in this plan utilise the provided nest boxes.

# 2.0 FAUNA SPECIES USING TREE HOLLOWS IN THE LOCALITY

Fifty-seven (57) species of animal that use natural tree hollows for nesting/roosting or as den sites were recorded as part of pre-approval surveys for the Pacific Highway upgrade, notwithstanding a number of other fauna that potentially inhabit the area (SKM 2010). Among those previously recorded fauna were 25 mammals, 23 hollow-dependent birds, three reptiles and six species of hylid frog with 12 of these currently listed as threatened fauna pursuant to the NSW *Threatened Species Conservation Act* 1995 (Appendix A). Perusal of the Bionet Wildlife Atlas data for the area suggest there are a few other hollow dependant species that may utilise tree hollows in this area, namely other hylid frogs (i.e. *Litoria chloris*), Stephens Banded Snake (*Hoplocephalus stephensii*), some bats (i.e. East Coast Free-tail Bat *Mormopetrus norfolkensis*) and birds including Masked Owl (*Tyto novaehollandiae*). Habitat descriptions including natural tree hollow characteristics for each of these species or species groups is provided in Appendix B.

# 3.0 DISTRIBUTION, CHARACTERISTICS AND SUITABILITY OF EXISTING TREE HOLLOWS

The use of tree hollows by fauna may depend on a number of factors including hollow characteristics (diameter, height, depth), the number of hollows in a tree, tree health, size, location, density and the resulting thermoregulatory capabilities of the hollows themselves (Gibbons and Lindenmayer 2003). A more detailed discussion of these factors in provided in Section's 4-6 with relevance to the species considered in this plan. This section describes the characteristics of tree hollow resources present within the RMS road corridor during a ground based observation survey between the 6th December 2011 and 12th October 2012. The actual delineation of clearing limits for construction is not yet known (Kristy Harvey pers. comm. 4.4.2012). Some additional information has been obtained on the extent of tree hollows in the adjacent landscape, as this information will determine the locations where nest boxes will be installed.

## 3.1 Areas Not Accessed

The following areas were not accessed as part of the field surveys:

- Ch. 43365-44365 which includes retained mature Coastal Blackbutt vegetation associated with MR J. F. McInnes property;
- A few properties scattered across the Nambucca Floodplain Investigation area including Ch. 50165-50665 (Hunt property), some smaller land parcels on the southern part of Old Coast Road (i.e. Farrawell and Browne properties) and Ch. 55765-56565 (Sheather and Clarke properties);
- Ch. 62665-62865 (Boggy Creek) where access could not be obtained at the time of the survey; and
- Ch. 69315-69765 but only the eastern side of existing carriageway which is more than 100 m from any likely construction works and contains a prominent incised drainage line.

Cumulatively, the above areas amount to approximately 3 km of the 40.8 km upgrade with most of this area occurring on the Nambucca River floodplain. To address this shortfall, the contractor should perform tree hollow surveys for the remaining areas as part of their pre-clearing inspection works prior to clearing and then calculate the required numbers of nest boxes in accordance with this plan (refer to Section 4.0).

## 3.2 Within the Clearing Footprint

### *3.2.1 Distribution*

Five hundred and nineteen (519) HBT's providing an estimated 2942 tree hollows have been identified between Warrell Creek (south) and the Waterfall Way/Pacific Highway interchange at Repton (Figure 3-1; Appendix C). Each of these trees have been assigned a designated number for reference (i.e. H01-H551[2]) and marked with white paint and pink or orange flagging tape.

The survey identified a number of areas as containing a high density (>6 hbt/ha) of tree hollow resources. They included:

- 15 HBT's along Albert Drive, Donnellyville (ch.46165);
- 25 HBT's growing within Old Coast Road reserve and adjacent crown land between ch. 53680-54050;
- 14 HBT's growing partly on Hartman property and Old Coast Road reserve between ch. 55300-55700;
- 13 HBT's where the carriageway first traverses Nambucca State Forest (Old Coast Road and Jacks Ridge Road, ch. 56965);
- 10 HBT's to the south of Old Coast Road in the central part of Nambucca State Forest (ch. 60065);
- 13 HBT's to the south of Cow Creek, Valla (ch. 63415);
- 24 HBT's to the south of Deep Creek, Valla (ch. 64335-64735);
- 38 HBT's at Blackbutt Drive, Valla Beach (ch. 66365);
- 50 HBT's in the vicinity of Burkes Lane, Oyster Creek (ch. 68565);
- 12 HBT's in the Mines Road, Pickett Hill (ch. 70765);
- 14 HBT's to the south of Ainsworth Road Cut, Newry (ch. 74065); and
- 13 HBT's at Raleigh South (ch. 80665).

[2] Nine of the mapped trees now occur adjacent to the clearing footprint.

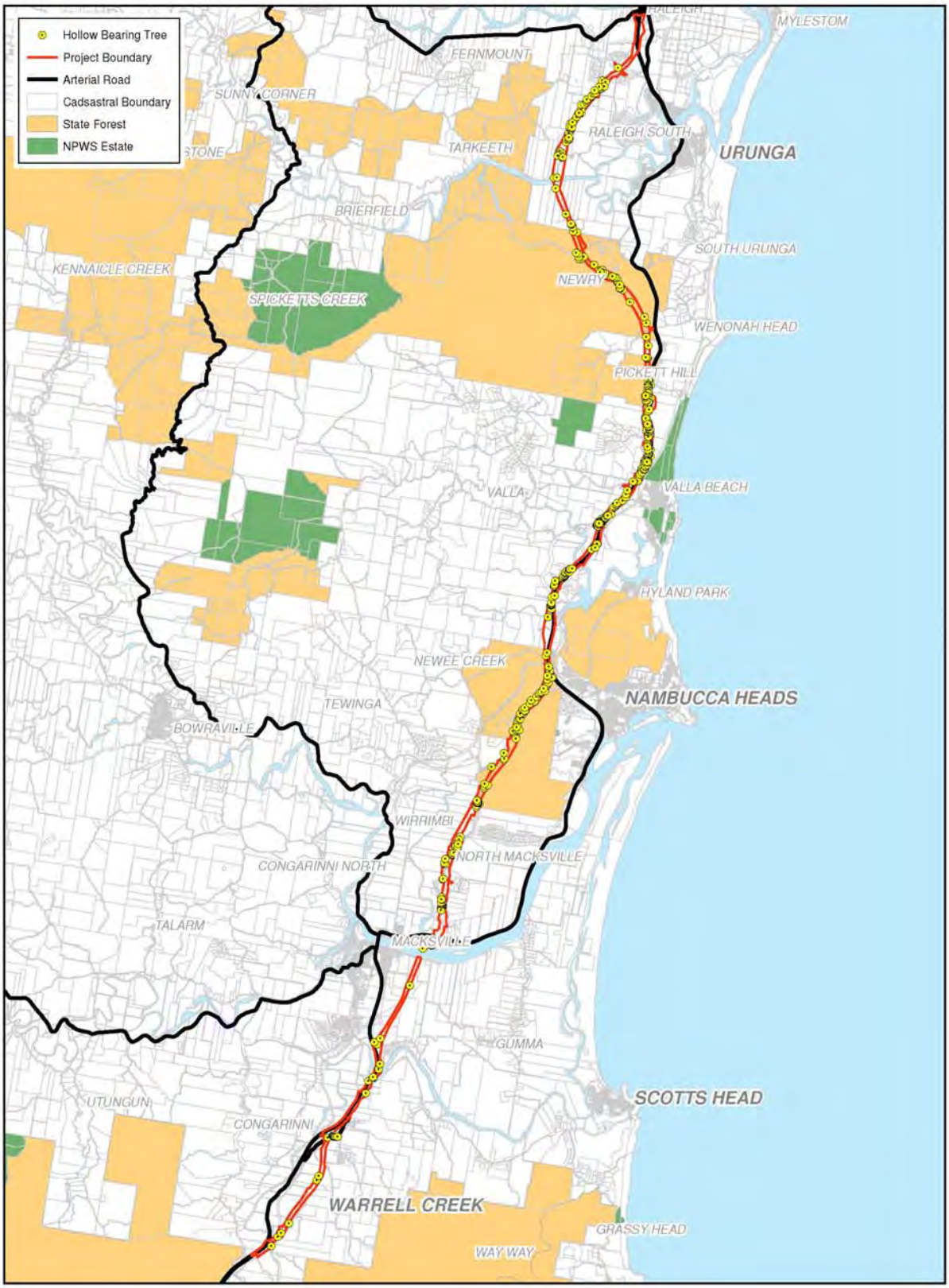


**Figure 1 : LOCATION OF HOLLOW BEARING TREES**

Source:
Cadastre: Roads and Traffic Authority 2007
HBT Survey: Lewis Ecological Surveys April 2012
Roads: Geoscience Australia 2009
Highway Design (footprint): RTA 2011
Project Boundary: RTA 2011
Drainage: Geoscience Australia 2009
State Forests: NSW DPI 2008

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0 1,900 3,800 5,700 7,600
Meters
A4 Scale 1:140,887

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**Figure 3-1.** Overview of hollow bearing tree resources for the Warrell Creek to Urunga Upgrade.

### *3.2.2 Tree Hollow Characteristics*

Of the 2942 identified tree hollows, 321 (11%) were trunk hollows, 2611 (89%) were limb hollows, and 10 (<1%) were basal trunk hollows (i.e. butt of the tree trunk). The size of each hollow was assigned into three size classes based on their estimated size of their entrance. This approach identified:

- 1542 small hollows (<50 mm);
- 960 medium hollows (50 – 150 mm);
- 394 large hollows (>150 mm);
- 36 trees had prominent fissures (narrows splits predominantly in tree trunk); and
- 10 basal/butt hollows.

Most of the identified 519 HBT's contained more than one hollow with an average of 5.7 functional hollows per tree (S.D =4.1). Around 12% of the identified HBT's contained ≥10 tree hollows with up to 32 hollows recorded in a large Coastal Blackbutt adjacent to Burkes Lane, Oyster Creek (ch. 26900).

### *3.2.3 Suitability of the Tree Hollow Resources to Fauna*

The suitability of each tree hollow to specific fauna groups was assigned primarily on the basis of the entrance size, tree species, status (live, dead), height above the ground and the size of the tree based on an estimated diameter at breast height (DBH). The spatial arrangement of hollows and their location within the landscape was also considered. For example, an isolated paddock tree containing hollows was considered unsuitable for gliders due to the canopy gap being beyond their normal volplane (i.e. gliding) capability. Similarly, a medium to large open hollow in dense vegetation away from water was not considered suitable for hollow nesting ducks (i.e. Maned Duck, *Chenonetta jubata*). The status of hollow using fauna is documented in Appendix A making reference as to whether the species has been previously recorded from or near (i.e. < 1km) the RMS road corridor. For example, the environmental assessment prepared by SKM (2010) identifies that higher levels of arboreal fauna diversity were recorded within the state forests. Caution should be exercised in this instance following the discovery of numerous tree hollow resources within the road corridor at locations where little or no survey effort had been employed for the EA. For example, Blackbutt Drive (ch. 24500) contains numerous senescent Coastal Blackbutt and to a lesser extent White Mahogany and Pink Bloodwood. This area provides habitat for species such as the threatened Yellow-bellied Glider and < 1km top the north some consideration should be given toward the presence of the threatened Squirrel Glider. Other common arboreal fauna including possums and smaller marsupial gliders probably also occur in this area. Other examples include the Oyster Creek area, the south end of Little Newry State Forest abutting private land and the existing Pacific Highway, and the southern part of Nambucca State Forest.

Perusal of Figure 3-2 illustrates:

- Most of the identified habitat trees provide hollows suitable for:
    - Arboreal herpetofauna including *Eulamprus* and *Egernia* skinks, arboreal snakes (i.e. Green Tree Snake) along with most of the hylid tree frogs known from the area.
    - Scansorial mammals such as the Brown Antechinus;
    - Microchiropteran bats;
    - Small gliding marsupials including the Feather-tail Glider (*Acrobates pygmaeus*) and Sugar Glider;
    - Larger Gliders including Greater Glider, Yellow-bellied Glider and Squirrel Glider (*Petaurus norfolcensis*); and
    - Parrots, particularly Scaly-breasted Lorikeet, Rainbow Lorikeet and Eastern Rosella.
- Two hundred and thirty-one (231) HBT's provide den resources for possums;
- One hundred and fifty-five (155) HBT's provide suitable retreat and overwintering sites for Lace Monitor;
- Fifty-six (57) HBT's provide suitable nest resources for black cockatoos and Australian King Parrot (*Alisterus scapularis*);
- Eighty-six (86) HBT's provide potential nest resources for smaller owls such as the Southern Boobook (*Ninox novaehollandiae*) and Barn Owl (*Tyto alba*); and
- Seven of the recorded HBT's were considered suitable for large forest owls including Masked Owl (*Tyto novaehollandiae*), Powerful Owl (*Ninox strenua*) and to a limited extent Sooty Owl (*Tyto tenebriscosa*).

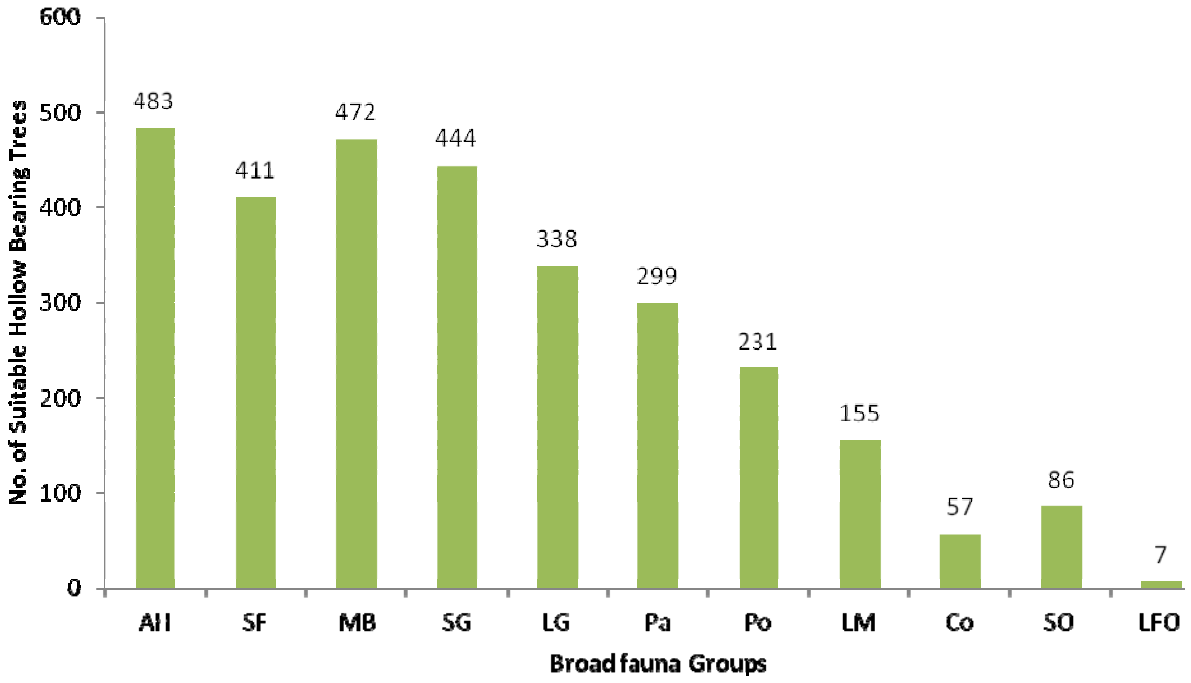


**Figure 3-2.** Suitability of the identified tree hollows to broad fauna groups from the 519 HBT's identified within the road corridor.

SF = Scansorial mammals (e.g. Antechinus), MB = Microchiropteran bats, SG = Small gliders (Feather-tail Glider, Sugar Glider), LG = Larger Gliders (Squirrel, Yellow-bellied, Greater), Po = Possums (Common Ring-tail Possum, Common Brushtail Possum and Short-eared Brush-tail Possum), PA = Parrots (i.e. Eastern Rosella, Lorikeets), LP = Large Parrot (i.e. King Parrot), Co = Cockatoos (Sulphur-crested Cockatoo, Yellow-tailed Black Cockatoo, Glossy Black Cockatoo), SO = Smaller Owls (Southern Boobook, Barn Owl), LFO = Large Forest Owl (Powerful Owl, Masked Owl, Sooty Owl), LM = Lace Monitor, AH = Arboreal herpetofauna (*Egernia*, *Eulamprus*, Tree Frogs)

### 3.3 A Look at Tree Hollow Resources Adjacent to the Clearing Footprint

Field surveys employing 1 hectare quadrats were established at 35 locations immediately adjacent to the road corridor to collect data on the density of HBT's and to estimate the number of functional tree hollows accordingly to the aforementioned size classes (Table 3-1). A range of broad fauna habitats were surveyed including:

- Riparian habitats of Upper Warrell Creek, Rosewood Creek, Warrell Creek and the Kalang River;
- Moist Sclerophyll Forests bordering riparian habitats (i.e. Warrell Creek) or within sheltered gullies in Nambucca and Newry State Forests;
- Swamp Forests on the southern side of the Nambucca River Floodplain, Hyland Park, Deep Creek area and further north at Raleigh (i.e. north of Short Cut Road); and
- Dry Sclerophyll Forests broadly distributed across the project.

In addition to broad fauna habitats some surveys were undertaken in:

- Forest types that had been recently logged (<6 months) by Forests NSW; and
- Plantation forest types in Newry State Forest to provide a snapshot look at habitat tree retention.

This survey identified most of the forested lands adjacent to the road corridor contain <4 HBT's per hectare. The exceptions were lands adjacent to chainages:

- North east of ch. 55800 (within Old Coast Road Reserve and boundary of Hartman Private Property);
- South of ch. 60365 (Allan's Trail in Nambucca State Forest);
- West of ch. 63965 (opposite Auld Close, Hyland Park);
- North west of Blackbutt Drive ch. 66565 (Valla); and
- East of ch. 79265 (Raleigh South).

Cursory surveys at Oyster Creek (Burkes Lane) indicate the high density of HBT's (~6 HBT/ha) continues beyond the RMS Road Corridor boundary and over an area of ~ 8 ha.

The majority of the HBT's occur within close proximity to roads, property boundaries or drainage lines. In a number of instances there is a disproportional density of HBT's within the road corridor when compared to the surrounding environs as these areas have historically been treated as "buffer" zones.

After reviewing the HBT data it was considered necessary to critique other specific tree hollow characteristics in assessing the need for nest boxes within a given area. At those localities where HBT's exceeding 4/ha they were assessed to see whether they contained a:

- High proportional of stags as opposed to senescent trees (i.e. >70%) indicating a reduced life expectancy of hollow resources;
- An adequate amount of tree hollows to accommodate displaced fauna during clearing operations;
- Were in close proximity to specific mitigation devices such as fauna underpasses and vegetated medians adopted for the project; or
- Form part of previously mapped key habitats and corridors linking important coastal lowlands with upland areas (Scotts *et al.* 2000).

With respect to this latter point, the EPA Key Habitats and Corridors Project identifies the Oyster Creek/Valla as forming a critical part of a regional habitat corridor known as the Oyster Creek Urunga Corridor. This corridor links large areas of coastal vegetation from Deep Creek in the south to the Bellinger River in the north, providing potential key linkages for threatened forest fauna.

Using the secondary consideration described above it was deemed necessary to provide nest boxes in the vicinity of:

- North east of ch. 55800 (within Old Coast Road Reserve and boundary of Hartman Private Property) given the number of tree hollows within a particular few trees (>12 per tree);
- South of ch. 60365 (Allan's Trail in Nambucca State Forest);
- Burkes Lane, Oyster Creek (ch. 68765); and
- Moyles Road area (ch. 73765).

The proposed recipient areas for nest boxes have been presented in Section 6.0 of this plan.

**Table 3-1.** Comparison between the numbers of HBT's identified for removal and the extent and characteristics of HBT's in adjacent forested land.
Note – omitted chainages reflect cleared lands or areas where field surveys could not be undertaken (i.e. Nambucca River Floodplain investigation area).
SoC = Side of Carriageway; No. = Number, M = Metres, ha = hectare, S = Small (<50mm), M = Medium (51-150 mm), L = Large (>150 mm), nd = no data, SC = Secondary Consideration as per text on page 7.

| Plot No | Chainage | No HBT Removed from 400 m section of carriageway | SoC | Fauna Habitat | Tree Hollows in Adjacent Forest | | | | | | | Nest Boxes Required | Nest Box Zone (Figure 3-1) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | No. Stags | No. Senescent Trees | Density ha | Estimated No. Functional Hollows | | | | | |
| | | | | | | | | S | M | L | Total | | |
| 1 | 42765 | 2 | West | Riparian with Flooded Gum, Tallowwood, White Mahogany, Weeping Lilly Pilly and Water Gum. | 0 | 2 | **2** | 5 | 0 | 0 | **5** | Yes | A |
| 2 | 43265 | 1 | East | Mixed Dry and Moist Sclerophyll Forest with Coastal Blackbutt, Pink Bloodwood, tallowwood and White Mahogany | 0 | 0 | **0** | 0 | 0 | 0 | **0** | No | - |
| 3 | 44665 | 2 | East | Riparian (weedy) with emergent Flooded Gum and weedy Camphor Laurel and Privet | 0 | 1 | **1** | 2 | 0 | 0 | **0** | Yes | B |
| 4 | 48365 | 6 | West | Mixed Riparian and Moist Sclerophyll Forest with Swamp Oak, Flooded Gum, Tallowwood, Grey Ironbark) | 0 | 2 | **2** | 4 | 2 | 0 | **0** | Yes | C |
| 5 | 56965 | 13 | East | Dry Sclerophyll Forest with Coastal Blackbutt, Red Mahogany and White Mahogany | 1 | 2 | **3** | 10 | 5 | 6 | **21** | Yes | D |
| 6 | 58165 | 0 | West | Dry Sclerophyll Forest with Coastal Blackbutt, Red Mahogany and White Mahogany | 0 | 2 | **2** | 5 | 0 | 0 | **5** | No | - |
| 7 | 58765 | 3 | East | Dry Sclerophyll Forest (Coastal Blackbutt, Pink Bloodwood) on ridges running down to Moist Sclerophyll Forest (Flooded Gum, Turpentine, Tallowwood) in gullies. | 0 | 0 | **0** | 0 | 0 | 0 | **0** | Yes | E |
| 8 | 59665 | 7 | West | Moist Sclerophyll Forest (Coastal Blackbutt, Flooded Gum, Red Mahogany, Turpentine) | 0 | 3 | **3** | 8 | 4 | 0 | **12** | Yes | F |
| 9 | 60365 | 12 | South | Dry Sclerophyll Forest (Coastal Blackbutt, Pink Bloodwood, Grey Gum, White Mahogany) | 1 | 3 | **4** | 14 | 6 | 3 | **23** | Yes | G (SC) |
| 10 | 61165 | 6 | East | Dry Sclerophyll Forest (Coastal Blackbutt, White Mahogany, Pink Bloodwood, Scribbly Gum, Red Mahogany) | 0 | 0 | **0** | 0 | 0 | 0 | **0** | No | - |
| 11 | 61315 | 7 | West | Dry Sclerophyll Forest (Coastal Blackbutt, White Mahogany, Tallowwood, Pink Bloodwood, Red Mahogany) | 1 | 2 | **3** | 6 | 1 | 0 | **7** | Yes | H |
| 12 | 61965 | 2 | West | Dry Sclerophyll Forest (Coastal Blackbutt, White Mahogany, Pink Bloodwood, Tallowwood, Red Mahogany) | 0 | 0 | **0** | 0 | 0 | 0 | **0** | No | - |
| 13 | 63865 | 5 | West | Dry Sclerophyll Forest (Coastal Blackbutt, White Mahogany, Pink Bloodwood, Red Mahogany, Tallowwood) | 1 | 4 | **5** | 11 | 6 | 2 | **19** | No | - |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 14 | 64565 | 20 | West | Swamp Forest (Red Mahogany, Swamp Mahogany, Coastal Blackbutt, Turpentine with Callicoma and occasionally Banksia | 0 | 3 | **3** | 6 | 3 | 1 | **10** | Yes | I |
| 15 | 66615 | 24 | West | Dry Sclerophyll Forest (Coastal Blackbutt, White Mahogany, Pink Bloodwood with dense Callicoma understorey in parts) | 0 | ~4 | **~4** | nd | nd | nd | **nd** | Yes | J (SC) |
| 16 | 68315 | 41 | West | Dry Sclerophyll Forest (Coastal Blackbutt, White Mahogany, Tallowwood, Pink Bloodwood, Flooded Gum) | 1 | 1 | **2** | 6 | 3 | 1 | **10** | Yes | K (SC) |
| 17 | 70215 | 15 | West | Dry Sclerophyll Forest (Coastal Blackbutt, White Mahogany, Tallowwood, Pink Bloodwood, Grey Ironbark) | 1 | 1 | **2** | 4 | 1 | 0 | **5** | Yes | L |
| 18 | 70865 | 16 | West | Dry Sclerophyll Forest (Coastal Blackbutt, White Mahogany, Pink Bloodwood, Grey Ironbark) | 0 | 0 | **0** | 0 | 0 | 0 | **0** | Yes | M |
| 19 | 71945 | 1 | West | Riparian Moist Sclerophyll Forest (Sydney Blue Gum, Grey Ironbark, Flooded Gum, Tallowwood with Water Gum) | 1 | 0 | **1** | 2 | 0 | 0 | **0** | No | - |
| 20 | 72415 | 2 | West | Dry Sclerophyll Forest (Coastal Blackbutt, Tallowwood, White Mahogany, Pink Bloodwood, Stringybark) | 0 | 1 | **1** | 3 | 1 | 0 | **4** | No | - |
| 21 | 72965 | 1 | East | Dry Sclerophyll Forest (Coastal Blackbutt, White Mahogany, Pink Bloodwood, Grey Ironbark, Turpentine) | 0 | 0 | **0** | 0 | 0 | 0 | **0** | No | - |
| 22 | 73565 | 2 | west | Dry Sclerophyll Forest (Coastal Blackbutt, Pink Bloodwood, Grey Ironbark, White Mahogany, Tallowwood) | 1 | 1 | **2** | 7 | 2 | 0 | **9** | Yes | N |
| 23 | 74565 | 7 | West | Moist Sclerophyll Forest in gullies (Red Mahogany, Small-fruited Grey Gum, Tallowwood) with Dry Sclerophyll Ridges (Coastal Blackbutt, Pink Bloodwood, Grey Ironbark, White Mahogany, Small-fruited Grey Gum, Tallowwood) | 0 | 0 | **0** | 0 | 0 | 0 | **0** | Yes | O |
| 24 | 75365 | 2 | West | Moist Sclerophyll Forest in gullies (Red Mahogany, Small-fruited Grey Gum, Tallowwood, Coastal Blackbutt) with Dry Sclerophyll Ridges (Coastal Blackbutt, Pink Bloodwood, Grey Ironbark, White Mahogany, Small-fruited Grey Gum, Tallowwood) | 2 | 0 | **2** | 4 | 3 | 2 | **9** | No | - |
| 25 | 75765 | 0 | East | Forest NSW Plantation (Coastal Blackbutt) with neighbouring gullies native regeneration of Red Mahogany, Turpentine, Tallowwood, Coastal Blackbutt) | 0 | 0 | **0** | 0 | 0 | 0 | **0** | No | - |
| 26 | 76765 | 1 | West | Dry Sclerophyll Forest (Coastal Blackbutt, White Mahogany, Pink Bloodwood, Red Mahogany, Tallowwood, Turpentine) | 1 | 0 | **1** | 3 | 1 | 0 | **4** | Yes | P |
| 27 | 77765 | 2 | West | Riparian Sclerophyll Forest with mix of dry | 1 | 0 | **1** | 2 | 1 | 0 | **3** | No | - |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | and moist elements (Grey Ironbark, Flooded Gum) with estuarine components (Swamp Oak, Grey Mangrove) | | | | | | | | | |
| 28 | 79265 | 9 | East | Dry Sclerophyll Forest upslope (Tallowwood, Small-fruited Grey Gum, Pink Bloodwood, Coastal Blackbutt, White Mahogany) with Swamp Forest on lower slopes (Broad-leaved paperbark, Swamp Mahogany) | 1 | 5 | **6** | 26 | 11 | 5 | **32** | Yes | Q (SC) |
| 29 | 80165 | 5 | West | Moist Sclerophyll Forest (Tallowwood, Flooded Gum, White Mahogany, Pink Bloodwood, Grey Ironbark) | 1 | 1 | **2** | 7 | 1 | 0 | **8** | Yes | R |
| 30 | 81665 | 1 | West | Swamp Forest (Swamp Mahogany, Swamp Oak, Cheese Tree) rising into Moist Sclerophyll Forest (Coastal Blackbutt, Tallowwood) | 0 | 0 | **0** | 0 | 0 | 0 | **0** | No | - |
| 31 | 49815 | 0 | West | Broad-leaved Paperbark and Swamp Oak Swamp Forest with surrounding cleared land | 0 | 0 | **0** | 0 | 0 | 0 | **0** | No | - |
| 32 | 50965 | 3 | East | Broad-leaved Paperbark and Swamp Oak Swamp Forest | 0 | 3 | **3** | 4 | 2 | 0 | **6** | No | - |
| 33 | 53915 | 25 | West | Under scrubbed moist sclerophyll forest (Tallowwood, Pink Bloodwood, White Mahogany, Coastal Blackbutt) perched above Swamp Forest | 1 | 2 | **3** | 8 | 3 | 0 | **11** | Yes | S |
| 34 | 55065 | 7 | East | Dry sclerophyll forest (Coastal Blackbutt, Pink Bloodwood, Tallowwood, Turpentine) | 1 | 2 | **3** | 7 | 2 | 1 | **10** | Yes | T |
| 35 | 55800 | 10 | East | Dry sclerophyll forest (Coastal Blackbutt, Pink Bloodwood, Tallowwood) | 1 | 4 | **2** | 7 | 2 | 0 | **9** | Yes | U |

# 4.0 NUMBER OF NEST BOXES REQUIRED

This section presents the proposed number of nest boxes required and the types of fauna the nest boxes should accommodate during stage one (ground based tree hollow survey) of a two stage assessment (i.e. recalculation once clearing of detailed design is completed). The final (i.e. second stage) will be an appraisal once the clearing works have been completed and a final tally of the actual numbers of hollow bearing trees and tree hollows has been tallied based on the detailed design (numerical data substituted back into the formulas provided below). At this point in the time the nest box plan will be updated to reflect the final number of nest boxes required and re submitted to the EPA for approval.

### 4.1 The Proposed Number of Nest Boxes Required

A condition for this project's approval was to compensate for the loss of HBT's by using nest boxes, however, it did not provide any scope as to the ratio or what defines when compensation is necessary. In this absence, those areas adjacent to the RMS road corridor that support fewer than 4 HBT's per hectare require nest boxes. Secondary considerations have also resulted in two initially exempt areas (i.e. ch. 60365, ch. 68765 and ch. 73765) being re classified as areas requiring nest boxes. This approach is consistent with the nest box plan prepared for the Kempsey Bypass project (Lewis 2010).

In this context 467 nest boxes of various sizes are required for the Warrell Creek to Urunga project with:

- 152 nest boxes required for the Warrell Creek to Nambucca Heads (ch. 61265); and
- 315 nest boxes required for the Nambucca Heads (ch. 61265) to Urunga Upgrade.

A two stage formula has been used to derive the number of nest boxes required for each area identified in Table 3-1.

# Stage 1:

# A x B x 1.3 = Proposed Number of Nest Boxes Required

Where:

**A** = Number of identified HBT's within the clearing footprint of a specified zone = Density HBT/ha
Area (ha) of vegetated land identified for removal

**B** = Total number of tree hollows identified = Mean number of functional hollows per HBT
Total number of HBT's within the zone

**1.3** = 30% error factor built in to accommodate for the difficulties associated with identifying tree hollows in habitat with one or more of the following factors:

- Dense lower or mid stratum (i.e. Callicoma);
- Particular tree species (i.e. Broad-leaved Paperbark) that are difficult to accurately critique for tree hollows;
- Adverse weather conditions when surveys had to be completed. For example, more difficult to identify tree hollows on cloudy days as the opportunities to utilise shadowing is not available.

As an example, using this formula at Zone I (ch. 64265-64865) can be summarised as follows:

- 4.5 ha has been identified for removal;
- 23 HBT's have been identified within the RMS road corridor; which contain
- 165 functional tree hollows.

Applying the base formula of:
5.11 (A) x 7.17 (B) = 36.7 nest boxes followed by the introduction of the 30% error/compensatory factor: 1.3 x 36.7 = 47.7. This number is then rounded up to the nearest whole number to show 48 nest boxes are required

for Zone I. This number is then reviewed in stage 2 and for every cockatoo/owl nest box required within a given zone an additional possum nest box is required to reduce competitive interactions for nesting/denning resources. Four additional possum boxes are required bring this total to 52. Stage 2 below is used to determine the types of nest boxes required.

# Stage 2:

Within each zone, the number and specific designs of nest boxes have been tailored to best accommodate for the loss of hollow resources. This has been done on a proportional basis, so if for example 20% of the tree hollows being removed are considered suitable for small gliders, then 20% of the nest boxes should be specifically designed for gliders such as Sugar Glider and Feathertail Glider. Using the Zone I example again:

- 52 nest boxes are required and these will comprise:
    - 6 microchiropteran bats;
    - 8 scansorial fauna (Antechinus/Phascogale) boxes;
    - 9 small gliders;
    - 6 larger gliders;
    - 9 possums;
    - 6 parrots/lorikeets;
    - 4 cockatoos, larger parrots or small owls with an additional 4 possum boxes to reduce competition.

Some specific fauna groups have been omitted from the nest box schedule given they have generalist habits (i.e. arboreal herpetofauna) which suggest they will utilise most of the current nest box designs or their nesting habits are synonymous with other widely scattered resources found adjacent to the footprint (i.e. termitaria for kingfishers). Moreover, the number of bat nest boxes has been reduced in a number of instances given their highly mobile habits compared to other fauna considered in this plan and the relatively low uptake rates recorded during monitoring for the Kempsey Bypass project (Lewis 2012 in prep).

### 4.2 Type of Nest Boxes to be Supplied

Most of the HBT's identified for removal contain small and medium sized limb and to a lesser extent trunk hollows which are considered suitable for smaller fauna including scansorial marsupials such as *Antechinus*, small gliders including the Feather-tail Glider and Sugar Glider, some larger species of glider (i.e. Yellow-bellied Glider), microchiropteran bats, possums, and smaller hollow dependant birds up to the size of lorikeets and rosella's. It therefore seems appropriate that the nest boxes themselves be designed with these fauna groups in mind. Ultimately, this equates to fewer large nest boxes capable of providing roosting and nesting habitat for cockatoos and owls.

Nest boxes considered suitable for the following fauna groups have been proposed:

- Scansorial fauna (*Antechinus*)
- Small gliders (Feather-tail Glider and Sugar Glider);
- Larger gliders (Squirrel Glider, Yellow-bellied Glider, Greater Glider)
- Possums (Common Brushtail Possum, Short-eared Possum and to a lesser extent Common Ringtail Possum);
- Microchiropteran bats (fluttering and direct flying species that utilise tree hollows);
- Medium sized parrots/lorikeets;
- Cockatoo (Black Cockatoos);
- Small Owls (Southern Boobook and Barn Owl); and
- Large Forest Owls (Masked Owl, Sooty Owl, Powerful Owl).

No specific nest box designs have been proposed for arboreal herpetofauna given they are considered to have generalist habits and likely to use a number of the designs proposed in this plan. For example, a juvenile python would be capable of using the bat and scansorial fauna nest boxes whilst a larger adult may be more inclined to seek refuge within a possum, cockatoo or small owl nest box.

Microchiropteran bats have been considered here as a single group and include only those species which utilise tree hollows (i.e. cave roosting species such as *Miniopterus spp* not considered). The target species range in size from the small (4 g) Little Forest Bat (*Vespadelus vulturnus*) through to the medium sized bats including the Chocolate Wattled Bat (*Chalinolobus morio*) and Gould's Wattled Bat (*Chalinolobus gouldi*) up to the relatively large Greater Broad-nosed Bat (*Scoteanax rueppellii*) and White-striped Mastiff Bat (*Tadarida australis*) which attain weights of 25-38 g. Whilst these and other species were recorded during the pre approval field surveys there is no evidence to suggest they actually utilise tree hollows within the clearing footprint which probably forms only a fraction of their home range (*see* Van Dyke and Strahan 2008). Moreover, roost site selection can be highly variable with entrances often larger than what may normally be required. For example, Gould's Wattled Bat is known to use roost sites with entrances of 100 mm whilst Lessor Long-eared Bat (*Nyctophilus geoffroyi*) may also use similarly large roosts as times, even where smaller tree hollows are spatially abundant (Dixon and Lumsden 2008; B. Lewis unpub. data). Given these unknowns and the fact that most of the bats being considered are relatively small (i.e. <20 g; *see* Churchill 2008) they have been considered here as a single group.

When providing nest boxes for microchiropteran bats, an important consideration is the thermoregulatory[3] properties of the nest box as this is thought to be a significant factor in bat roost site selection (Gibbons and Lindenmayer 2002; Lourenco and Palmeirim 2004). Even when the requirements are met for a single species or size guild there may also be seasonal requirements in relation to migratory habits or breeding biology. For example, Bechstein's bats (*Myotis bechsteinii*) in Germany tend to prefer sun-exposed boxes during lactation whereas shaded boxes were preferred pre-lactation (Kerth *et al*. 2001).

Attempting to successfully compensate for the larger more mobile species may also result in a reduction of nest box use or effectiveness of this plan. For example, there is limited evidence to suggest black cockatoos will readily use artificial nest boxes. Given that both the Yellow-tailed Black Cockatoo and Glossy Black Cockatoo have been recorded in the area on a number of occasions, it is appropriate that an equitable number of nest boxes be constructed for these species. This is partly due to the relatively low number of suitable tree hollows located throughout the adjacent forests, particularly Nambucca, Little Newry and Newry State Forests (pers. obs). Whilst herpetofauna have not been specifically accounted for it is expected that at least some of the nest boxes will provide amicable refuge habitat.

In relation to the Large Powerful Owl evidence indicates they can typically inhabit tracts of forests in the vicinity of 500-1000 ha so there are a lot of potential nest sites in this area. It should be noted that this report is based on a preliminary ground based assessment and will be updated following clearing works. Hence this would allow for the possibility of an increase in the number of nest boxes for the Large Powerful Owl, should the post clearing survey justify it.

[3] Thermoregulation relates to the ability of an animal to keep its body temperature within certain boundaries, even when the surrounding temperature is very different. This process is one aspect of homeostasis, a dynamic state of stability between an animal's internal environment and its external environment.

**Table 4-1.** Proposed number of nest boxes for each of the identified nest box zones.

**Note** - Flexibility should be permitted to change the placement of nest boxes as currently proposed if landholder agreement is not reached. Contractor's Project Ecologist to perform.

Ha = Hectare, No. = Number, HBT = Hollow Bearing Tree. SoC = Side of Carriageway, RMS = Roads and Maritime Services, SF NSW = State Forests NSW.

Specific Designs: MB = Microchiropteran bats, SF = Scansorial mammals (e.g. Antechinus, Phascogale), SG = Small gliders (Feather-tail Glider, Sugar Glider), Po = Possums (Common Ring-tail Possum, Common Brushtail Possum and Short-eared Brush-tail Possum), P/L = Parrots (i.e. Eastern Rosella, Lorikeets), Co = Cockatoos/Large Parrot (Sulphur-crested Cockatoo, Yellow-tailed Black Cockatoo, Glossy Black Cockatoo, King Parrot), SO = Smaller Owls (Southern Boobook, Barn Owl). C = Cockatoo, S = Small Owls

Add. Poss refers to the number of possum boxes required in the vicinity of Cockatoo/King parrot/Small Owl/Large Forest Owl nest boxes to discourage their uptake of these nest boxes.

| Zone | Chainages | Area removed ha | No. HBT Removed | No. Functional Hollows | No. Nest Boxes required | Specific Designs | | | | | | | | | Position | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | MB | SF | SG | LG | Po | P/L | Co/SO | LFO | Add. Poss | SoC | Tenure | Comment |
| **WC2NH** | | | | | | | | | | | | | | | | | |
| A | 42565-43015 | 5.2 | 2 | 22 | **6** | 0 | 2 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | East | Private | Install on eastern side of ch. 42865. Note - glider incisions tentatively identified in this area and connects with contiguous vegetation to the east. |
| B | 44765-44965 | 0.75 | 2 | 7 | **14** | 3 | 2 | 0 | 0 | 3 | 4 | 1 | 0 | 1 | Either | Private | Install either side of the drainage line. Property owner specifically requested nest boxes. RMS will continue to consult and negotiate with property owners. |
| C | 48265-48765 | 6.1 | 6 | 23 | **5** | 2 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | East | RMS | Install within RMS road corridor on eastern side bordering Warrell Creek. Contributes into dry fauna corridor crossing structure for northern side of Warrell Creek. |
| D | 56865-57465 | 5.8 | 13 | 62 | **15** | 2 | 2 | 3 | 2 | 2 | 2 | 1 | 0 | 1 | East | RMS/SFNSW | Install on the RMS/Nambucca SF boundary with final location to be determined by project ecologist. Note – this area may need to be reviewed as part of redesign with the Nambucca Floodplain investigation area. |
| E | 58565-59065 | 7.0 | 3 | 11 | **3** | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | East | RMS/SFNSW | Retain HBT64 and install nest boxes on RMS/Nambucca SF boundary ch. 58515. Ties into combined culvert/fauna underpass. |
| F | 59465-60015 | 7.2 | 12 | 50 | **10** | 0 | 3 | 2 | 2 | 2 | 1 | 0 | 0 | 0 | West | RMS/SFNSW | Install on the RMS Nambucca SF boundary. Must consider Yellow-bellied Gliders and any potential crossing points. Adjacent to proposed vegetated median. |
| G | 60115-60915 | 9.2 | 19 | 110 | **17** | 1 | 3 | 3 | 4 | 3 | 1 | 1 | 0 | 1 | South | RMS/SFNSW | Install on the RMS Nambucca SF boundary. Must consider Yellow-bellied Gliders and any potential crossing points around Allan's Fire Trail. |
| S | 53680-54100 | 2.7 | 25 | 101 | **49** | 10 | 6 | 13 | 6 | 6 | 6 | 2 | 0 | 0 | West | RMS/Crown/Private | Ideally there should be sufficient tree retention to provide amenity improvements on western side thus retaining a number of hollow bearing trees. Nest boxes should also be placed in this area. At the interface with RMS/private/crown tenures. |
| T | 55000-55400 | 8 | 9 | 53 | **9** | 0 | 2 | 3 | 2 | 1 | 1 | 0 | 0 | 0 | East | RMS/Private | Position boxes on the eastern side of the Old Coast Road service road within RMS retained vegetation. |
| U | 5550055750- | 4 | 9 | 73 | **24** | 3 | 2 | 5 | 5 | 5 | 3 | 1 | 0 | 0 | | RMS/Private/Old Coast Road reserve | Construction contractor should make efforts to retain HBT in this area in particular HBT551. Nest boxes should be positioned on eastern side north of ch. 55700 at the discretion of the Project Ecologist. |
| | | | | **WC2NH Total** | **152** | **21** | **24** | **30** | **23** | **27** | **18** | **6** | **0** | **3** | | | |
| **NH2U** | | | | | | | | | | | | | | | | | |
| H | 61265-61865 | 15.3 | 10 | 33 | **3** | 0 | 1 | | 1 | | 1 | 0 | 0 | 0 | West | RMS/SFNSW | Ch. 61365 install on boundary within retained vegetation or alternatively within riparian zone of Cedar Creek. |
| I | 64265-64865 | 4.5 | 23 | 165 | **52** | 6 | 8 | 9 | 6 | 9 | 6 | 4 | 0 | 4 | Both | Private and RMS | Seek landholder support for installation. Ensure at least half of nest boxes occur within swamp forest habitat. May need to considered adjacent vegetation to the south bordering Valla Road. |
| J | 66165-66765 | 10.2 | 40 | 259 | **36** | 4 | 5 | 6 | 5 | 5 | 5 | 3 | 0 | 3 | West | Private | Give due consideration to retaining as much remnant vegetation as possible. Specialist surveys for Yellow-bellied Glider warranted here. RMS will continue to consult and negotiate with property owners. |
| K | 68165-68815 | 5.7 | 60 | 427 | **109** | 12 | 15 | 15 | 15 | 15 | 15 | 9 | 2 | 11 | West | Private | Negotiate with private landowners to west of ch. 68765. Forest through here contains old growth elements and specialist surveys should be undertaken to quantify the presence of threatened hollow dependant fauna including large gliders and large forest owls. Ties in with combined culvert fauna underpass. RMS will continue to consult and negotiate with property owners. |
| L | 70065-70565 | 10.4 | 19 | 106 | **14** | 2 | 3 | 3 | 2 | 2 | 2 | 0 | 0 | 0 | East | RMS | Install within RMS corridor on eastern side of ch. 65565-70065 to increase security over tenure and maintenance. Ties in with combined culvert fauna underpass. |
| M | 70565-71065 | 5.1 | 21 | 145 | **41** | 4 | 7 | 5 | 7 | 4 | 6 | 4 | 0 | 4 | Both | RMS, SFNSW, Private | Install a cross section of boxes in each tenure. Consult with SF NSW, to seek support for the installation of nest boxes within drainage lines (Forest Management Zones). |
| N | 73465-74065 | 10.8 | 9 | 40 | **5** | 0 | 2 | | 2 | 1 | 0 | 0 | 0 | 0 | Both | RMS | Install boxes in areas to tie in with areas adjacent to the vegetated |

| Zone | Chainages | Area removed ha | No. HBT Removed | No. Functional Hollows | No. Nest Boxes required | Specific Designs | | | | | | | | | | Position | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | MB | SF | SG | LG | Po | P/L | Co/SO | LFO | Add. Poss | SoC | Tenure | Comment |
| | | | | | | | | | | | | | | | | | medians being used to maintain glider connectivity. |
| O | 74365-74865 | 7.1 | 8 | 31 | **6** | 0 | 2 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | Either | RMS | Project ecologist to advise once clearing limits defined on refined design. Installation should occur within the RMS/SF interface. Ties in with dedicated fauna underpass. |
| P | 76165-76765 | 6.6 | 5 | 24 | **10** | 2 | 2 | 3 | 2 | 0 | 1 | 0 | 0 | 0 | West | RMS | Increased the error factor to 100% after considering the structure of the existing Swamp Mahogany forest (i.e. likely to contain more hollows then documented) and its local importance for seasonal foraging resources. All nest boxes to be installed within or close to this community (ch. 76290-76565). |
| Q | 79065-79765 | 8.75 | 13 | 63 | **11** | 0 | 2 | 1 | 2 | 2 | 2 | 1 | 0 | 1 | Either | RMS | Install nest boxes within retained vegetation within the RMS road corridor. Occurs within an area identified for retained vegetated median. |
| R | 80065-80765 | 9.1 | 17 | 96 | **16** | 2 | 3 | 2 | 3 | 2 | 2 | 1 | 0 | 1 | Either | RMS | Install on both sides but ensure the swamp forest vegetation on eastern side is given due consideration. For example, retain vegetation to the east of ch. 80565 or move boxes south into the vegetated median zone. |
| | | | | **NH2U Total** | **303** | **32** | **50** | **46** | **47** | **40** | **40** | **22** | **2** | **24** | | | |

# 5.0 DESIGN AND CONSTRUCTION OF NEST BOXES

## 5.1 Some Design Considerations

The recommended dimensions of nest boxes for fauna known or considered likely to occur in the vicinity of the carriageway has been summarised in Table 5-1. Whilst recognising that different fauna require different nest box dimensions the constructed box should take the following design considerations into account:

- Consideration for the target species or fauna group so that:
  - The entrance hole is no larger than for the intended recipient;
  - The entrance hole is positioned toward the top of the nest box so the area remains dark;
  - Rear entrances may be used for some species, namely gliders and bats to avoid competition from non target species (see below); and
  - Rough sawn timber to allow animals to grip the exterior of the nest box.
- Should consider the need for anti competition devices such as:
  - Rear openings for scansorial fauna, bats and gliders to avoid uptake by Common Myna (*Acridotheres tristis*) or common generalist birds such as Rainbow Lorikeets (*Trichoglossus haematodus*);
  - Anti pest devices should be considered. For example, Buffalo Fly ear tags are considered a suitable deterrent for the European Bee (*Apis mellifera*) when positioned close to the nest box entrance.
- Specific furniture needs of the intended recipient fauna such as:
  - Lining the floor with ≥20 mm of non-toxic wood shavings, or in the event they conceal the opening of the nest box, an alternative material such as decayed wood or shredded bark should be selected; and
  - Provision of toe holds to enable young to climb from the nest box.
- A number of weather associated variables including:
  - The use of ≥30 mm thick timber to insulate against heat and cold;
  - All joins and gaps should be sealed with a non toxic glue;
  - The lid of the nest box should overhang by ≥25 mm like an awning to reduce moisture damage;
  - Small drain holes should be placed in the bottom front section of the nest box; and
  - The exterior should be preferably painted with a dark coloured outdoor water-based acrylic paint or oil, and the internal surfaces left unpainted.
- Whilst considering the above, the thermoregulatory capabilities of the nest box need to be considered, particularly for bats as this is thought to significantly influence roost use (*see* Gibbons and Lindenmayer 2002; Lourenco and Palmeirim 2004). This may be achieved using one or more variables including but not limited to the thickness of the nest box walls, external colour of the box (white versus black or an intermediate colour such as grey) or aspect in its positioning. Whilst this has been the focus of little research effort in Australia several overseas studies support this (*see review in* Goldingay and Stevens 2009). For example, Soprano Pipistrelles (*Pipistrellus pygmaeus*) in Portugal preferred the high temperatures (~40$^{o}$C) associated with black roost boxes over white or grey coloured boxes (Lourenco and Palmeirim 2004). Seasonally, Bechstein's bats (*Myotis bechsteinii*) in Germany seem to prefer sun-exposed boxes during lactation whereas shaded boxes were preferred pre-lactation (Kerth *et al*. 2001).
- Given that monitoring is often proposed there should be allowances for routine maintenance included in the overall nest box design. For example, a hinged lid to allow visual inspection and maintenance access.
- Where monitoring is proposed, the labelling of the nest boxes should be in such a way so as to easily identify them from other nest boxes. For example, a box number and code for each fauna group be stamped or riveted onto the bottom or side of each nest box to enable easier identification, preferably from the ground.
- There should be no sharp edges such as protruding nails or staples.
- Where nest boxes are being designed specifically for gliders they should have a good landing surface close to the nest box such as a large branch.
- The design of the positioning and fastening mechanism should be sturdy and stable and preferentially with a slight forward lean to assist with drainage whilst allowing for growth in the host tree. It is recommended that bracketing use the Habisure™ system (Hollow Log Homes Pty Ltd) where possible as this has the added advantage of allowing at least one metre growth in the diameter of the host tree before adjustment is required, is non-invasive to the tree and provides the required security (Figure 5-1).

**Table 5-1.** Summary of specifications for nest boxes targeting specific species or fauna groups (Grant 1997; Franks and Franks 2006; McNabb and Greenwood 2011).

Dimen = Dimension.

1 = Nest boxes are to be installed as close to the canopy as possible, thus in the first instance the upper limit of the height range is to be adopted. The lower limit should only be referred to where a series of constraints are present and be approved by the RMS Project Ecologist or Environment Manager. Note – designs 6 and 7 culminate into the required 25 boxes for cockatoos/owls/larger parrots.

| Nest Box Type | Total No Required | Fauna Group | Nest Box Dimensions (Grant 1997; Franks and Franks 2006) | | | | Comments |
|---|---|---|---|---|---|---|---|
| | | | Inner Dimen. (mm) | Depth (mm) | Entrance Width (mm) | Height Above Ground [1] (m) | |
| 1 | 64 | Scansorial mammals (i.e. Antechinus, Brush-tailed Phascogale) | 180 x 180 | 300 | 35 – 40 | 5-8 | Timber should be at 30 mm thick for insulation. Choose a tree with no side branches for predator avoidance. Flap of carpet over the entrance to prevent a draft. Drill 5 mm drainage holes at the base of the box. |
| 2 | 40 | Microchiropteran bats (fluttering and direct flying species) | 200 x 200 | 400 | 10 – 30 | 5-8 | Wedge shaped design reduces build up of guano. PVC design can also be used. Entrance should be a slit at the bottom of the box and heavily grooved to promote grip. |
| 3 | 55 | Small Gliders (i.e. Sugar Glider) | 200 x 200 | 300 | 40-45 | 5-8 | Recent research would suggest 5 m is sufficient positioning height (R. Goldingay pers. comm.). |
| 4 | 57 | Larger Gliders (i.e. Yellow-bellied Glider) | 250 x 300 | 400 | 70-90 | 8-10 | Use rear entry design to reduce uptake by possum and other non specific fauna. |
| 5 | 55 | Possums (Brush-tails) | 250 x 300 | 400 | 85-100 | 5-8 | A ladder of wire mesh or cut steps on the inside will allow the young to climb out. |
| 6 | 12 | Small Owls (Boobook Owl, Barn Owl) | 250 x 300 | 500 | 100 | 8-10 | Make spout entrance short and horizontal. |
| 7 | 13 | Black Cockatoos/Large Parrots (King Parrot) | 300 x 400 | 1200 | 200 | 8-10 | A large piece of timber should be attached to the lid for chewing. Layer of sawdust will attract cockatoos and 5mm drainage holes should be placed in base of box. Angled spout entrance. |
| 8 | 48 | Medium-sized Parrots (Lorikeets/Rosellas) | 200 x 200 | 400 | 65 | 5-8 | Layer of sawdust will attract parrots such as Rosellas. Place 5 mm drainage holes in the base of the box. |
| 9 | 2 | Large forest owls | 550 x 550 | 800 | 200 | 12-20 | May have to be custom build and installed using an elevated work platform (EWP) or specialist tree climbers. |

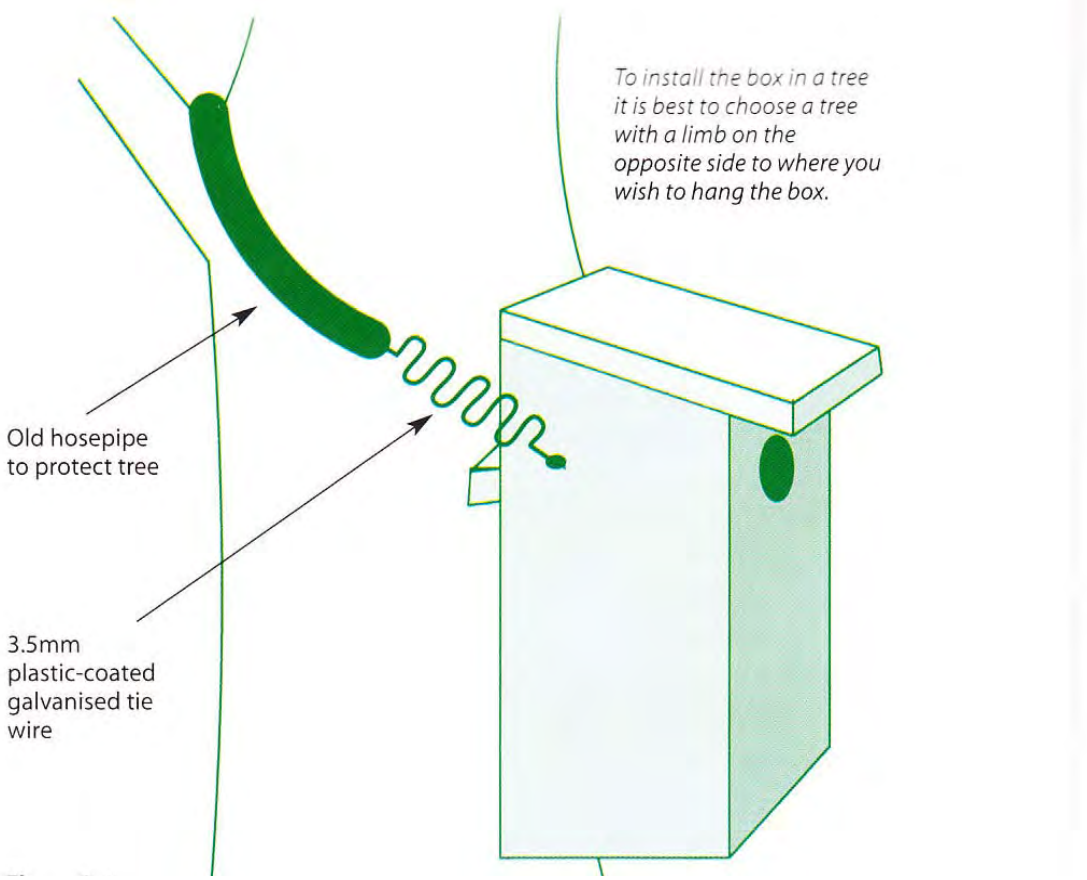


**Figure 5-1.** Diagrammatic sketch of the Habisure system. Courtesy of Alan and Stacey Franks (Hollow Log Homes ©)

### 5.2 Dealing with Non Target or Pest Species

A number of pest species both native and exotic are relevant to this plan and are known to utilise both natural hollows and nest boxes. The most relevant ones to this plan are:

- European Bee;
- Exotic birds including Common Myna and Common Starling (*Sturnus vulgaris*); and
- Termites and ants.

These species may construct hives or nests in boxes that exclude the target groups of hollow dependant fauna. Six European Bee hives have been recorded within the RMS road corridor including a:

- Stag (HBT 3) at ch. 42885;
- Dead stag (HBT 14) at ch. 46165;
- Coastal Blackbutt (H226) at ch. 67415;
- Coastal Blackbutt (H263) at ch. 68365;
- Tallowwood (H244) at ch. 68565;
- Tallowwood (HBT 395) at ch. 74215; and
- Turpentine (HBT 526) at ch. 53985.

This is undoubtedly an underestimate as conditions were often unsuitable for conducting hive surveys (i.e. often raining).

Termites can similarly invade nest boxes and eventually consume them, whilst ants although not known to prevent nest box use, can cause maintenance problems. Natural hollows frequently used by exotic birds can out compete native species for nesting resources. The introduction of nest boxes may further facilitate habitat availability for exotic birds resulting in an increase of the local population and in some instances may contribute to key threatening processes pursuant to the *TSC* Act. For example, inadvertently providing habitat for European

Bees. Therefore, a number of recommendations have been suggested to eliminate pest species from nest boxes including the use of:

- Rear openings for glider and bat boxes to reduce uptake by non target species;
- Replacement of a perch with a router-grooved ladder. Nest boxes without a visible entrance hole are less likely to be used by birds (Birds Australia 2001);
- Pest strips or Buffalo Fly ear tags attached and passed into the nest box on a long pole when a colony of ants, termites or honeybees are inactive so as to destroy established colonies; and
- Talcum powder, Coupex ® and other domestic agents can be applied to the entrance of a nest box to deter ants.

It is recommended these later strategies form part of the monitoring and maintenance schedule.

# 6.0 DISTRIBUTION AND POSITION OF NEST BOXES

This section extends on from the discussion in Section 3.0 which set out to determine broad areas where nest boxes were required. The selected location and positioning of nest boxes is a fundamental component of this plan given that it will ultimately determine the effectiveness of this as a mitigation tool. The use of nest boxes may also be affected by the availability of tree hollows in the surrounding area which varies in this context from nil to 6 HBT's per hectare in the measured 1 ha quadrats and estimates of 8 HBT's per hectare in an area to the west of Burkes Lane (*see* Table 3-1).

As a general rule nest boxes should be installed on large (>400 mm dbh), mature trees close to or on the main trunk. Taking this into account the proposed locations shown in Table 4-1 have also considered:

- The number of tree hollows identified for removal in that part of the construction corridor;
- The residual number of tree hollows on those lands adjacent to the clearing footprint;
- The suitability of those tree hollows to fauna adjacent to the clearing footprint;
- Availability and suitability of other key life cycle components such as foraging resources for displaced fauna including but not limited to autumn-winter flowering Swamp Mahogany (*Eucalyptus robusta*) and Broad-leaved Paperbark (*Melaleuca quinquenervia*), late winter-spring spring flowering Forest Red Gum (*Eucalyptus tereticornis*) or the presence of *Allocasuarina spp* in the case of the Glossy Black Cockatoo;
- Habitat connectivity in the context to those area's identified for removal and the intended recipient fauna; and
- Other fauna mitigation devices and their locations along the carriageway. For example, fauna underpasses and vegetated medians.

Preference has also been given to:

- Areas that contained mixed aged stands of trees, some of which have started to produce tree hollows albeit in low densities or are likely to in the short-medium term (20-40 yrs); and
- Where preferably within RMS's managed road reserve or have been endorsed by landholders during initial consultations.

In addition to those points raised above, the behavioural ecology of the target species must also be considered along with site specifics including aspect, positioning height above the ground, installation techniques and the spatial arrangement or density of nest boxes. This latter point is required to meet the territorial needs of some species that will vigorously defend a territory, attacking individuals of the same species, and occasionally destroying rival nests. Others species are more gregarious, tolerating overlapping home ranges. Therefore an understanding on the individual territorial requirements of a species' can be used as a guide to the density of nest boxes within any given area. Lindenmayer *et al.* (2003) suggested there is a spatial trend in the occupancy pattern of nest box use where nest boxes used for arboreal marsupials placed in a clump of four had greater occupancy rates over time. This would suggest the occupancy of nest boxes by fauna would depend on the density of other roosting/nesting habitat resources within the localised area. Tables 4-1 and 6-1 have been used as a guide in selecting the location and density of nest boxes within the nominated areas.

The position of the nest box on the host tree has also been considered in the context of predominant weather patterns, along with light and noise disturbances arising from the carriageway. It is proposed that nest boxes be installed with their entrances facing away from the lights of traffic and from a north west to south east position on the tree trunk to provide additional shelter from rain and wind (i.e. dominant rainfall from the south west). If this is not always possible, an alternative, particularly for glider nest boxes is to have the entrance facing into the tree. This would necessitate a maintained gap between the nest box entrance and the tree of around 100 mm.

Another important consideration is the height at which nest boxes are placed in the host tree. It has often been recommended that nest boxes be placed as high as possible to protect the occupants from predation and low enough to allow monitoring and maintenance. After considering the preferred height of nest box placement for each of the fauna groups it is recommended that nest boxes be positioned at heights of 5-8 m and possibly a little higher for specific fauna such as black cockatoos (8-10 m) and higher again for the two large forest owl nest boxes. The recommended height has taken into account the surrounding structure of the vegetation where the overstorey ranges from 11-16 m in the Swamp Forest communities to more than 25 m in the taller moist

sclerophyll forest found around throughout the state forests. After considering the heights proposed for the installation of the nest boxes a suitable extension ladder with the necessary safety equipment and training would be sufficient to install and subsequently monitor them or alternatively a portable Elevated Work Platform (EWP). In the cases of the large forest owl nest boxes it may be necessary to have them installed by specialist tree climbers.

**Table 6-1.** Breeding territory and distance required between nest boxes for native fauna that utilise tree hollows and were either recorded, or considered likely to occur along the carriageway.

Bold type denotes vulnerable fauna pursuant to the NSW *TSC* Act. NS = No nest boxes supplied for these species.

| Common Name | Scientific Name | Territorial at any stage of life-cycle? (y/n) | Breeding territory (ha) or distance between nests (m) | Distance between nest boxes (m) | Nest Box Type (see Table 5-1) |
|---|---|---|---|---|---|
| **Birds** | | | | | |
| Australian Wood Duck | *Chenonetta jubata* | Y[1] | unknown[1] | - | NS |
| Grey Teal | *Anas gracilis* | Y[1] | 1 pair per 0.25 ha[1] | - | NS |
| Chestnut Teal | *Anas castanea* | Y[1] | unknown[1] | - | NS |
| **Glossy Black Cockatoo** | ***Calyptorhynchus lathami*** | **N[2]** | **-** | **-** | **7** |
| Yellow-tailed Black Cockatoo | *Calyptorhynchus funereus* | N[2] | - | - | 7 |
| Galah | *Cacatua roseicapilla* | N[2] | - | - | 6 |
| Long-billed Corella | *Cacatua tenuirostris* | N[2] | 5 nests per tree[2] | 2-3 m | NS |
| Sulphur-crested Cockatoo | *Cacatua galerita* | N[2] | - | - | 7 |
| Rainbow Lorikeet | *Trichoglossus haematodus* | N[2] | Several pairs in same tree[2] | 2-3 m | 8 |
| Scaly-breasted Lorikeet | *Trichoglossus chlorolepidotus* | N[2] | Several pairs in same tree[2] | 2-3 m | 8 |
| Musk Lorikeet | *Glossopsitta concinna* | N[2] | Several pairs in same tree[2] | 2-3 m | 8 |
| **Little Lorikeet** | ***Glossopsitta pusilla*** | **N[2]** | **Several multiple species in same tree[2]** | **2-3 m** | **NS** |
| Australian King Parrot | *Alisterus scapularis* | Y[2] | 100 m[2] | 100 m | 7 |
| Eastern Rosella | *Platycercus eximius* | Y[2] | 90 m[2] | 90 m | 8 |
| **Powerful Owl** | ***Ninox strenua*** | **Y[2]** | **300-1500 ha[2]** | **3.8 km** | **9** |
| **Sooty Owl** | ***Tyto tenebricosa*** | **Y[2]** | **200-800 ha[2]** | **2.5 km** | **9** |
| **Masked Owl** | ***Tyto novaehollandiae*** | **Y[2]** | **200-800 ha[2]** | **2.5 km** | **9** |
| Southern Boobook | *Ninox novaeseelandiae* | Y[2] | 37 ha[2] | 600 m | 6 |
| Barn Owl | *Tyto alba* | Y[2] | 300 m[2] | 300 m | 6 |
| Australian Owlet-Nightjar | *Aegothesles cristatus* | Y[2] | <80 ha[2] | 750-900 m | 8 |
| Laughing Kookaburra | *Dacelo novaeguineae* | Y[2] | 25 ha[2] | 500 m | NS |
| Sacred kingfisher | *Todiramphus sanctus* | Y[2] | 4 ha[3] | 200 m | NS |
| Dollarbird | *Eurystomus orientalis* | Y[2] | 14 ha[3] | 300 m | NS |
| White-throated Treecreeper | *Cormobates leucophaeus* | Y[3] | 3-7 ha[3] | 170-250 m | NS |
| Striated Pardalote | *Pardolotus striatus* | Y[3] immediate area | Pairs up to 100's pairs | 2 m | NS |
| Starling [I] | *Sturnus vulgaris* [I] | Y[4] | 2.3 territories/ha | 100 m | NS |
| Common Myna [I] | *Acridotheres tristis* [I] | Y[4] | 0.8-2.0 ha | 125 m | NS |
| **Reptiles** | | | | | |
| Southern Leaf-tailed Gecko | *Phyllurus platurus* | N[5] | - | - | NS |
| Tree Skink | *Egernia mcpheei* | | | | NS |
| Lace Monitor | *Varanus varius* | Unknown[5] | - | - | NS |
| Diamond Python | *Morelia spilota spilota* | Unknown[5] | - | - | NS |
| Carpet Python | *Morelia spilota* | Unknown[5] | - | - | NS |
| **Frogs** | | | | | |
| Bleating Tree Frog | *Litoria dentata* | N[6] | - | - | NS |
| Perons Tree Frog | *Litoria peronii* | N[6] | - | - | NS |
| Tyler's Tree Frog | *Litoria tyleri* | N[6] | - | - | NS |

| Common Name | Scientific Name | Territorial at any stage of life-cycle? (y/n) | Breeding territory (ha) or distance between nests (m) | Distance between nest boxes (m) | Nest Box Type (see Table 5-1) |
|---|---|---|---|---|---|
| **Mammals** | | | | | |
| Brown Antechinus | *Antechinus stuartii* | N[7] | 1-2 ha[8] | - | 1 |
| **Brush-tailed Phascogale** | ***Phascogale tapofata*** | **Y[8]** | **5-60 ha[8]** | **-** | **1** |
| Mountain Brushtail Possum | *Trichosurus caninus* | Y[8] | 0.2-4 ha[8] | 100 m | 5 |
| Common Brushtail Possum | *Trichosurus vulpecular* | Y[8] | 0.2-4 ha[8] | 100 m | 5 |
| Feather-tail Glider | *Acrobates pygmaeus* | N[9] | 0.15-2.1 ha[10] | ~2-4[9] | 1/2 |
| Sugar Glider | *Petaurus breviceps* | Unknown[11] | 0.89-1.54 ha[11] | 100-125 m | 3 |
| **Squirrel Glider** | | | | | **3/4** |
| **Yellow-bellied Glider** | ***Petaurus australis*** | **Y[14]** | **30-60 ha** | **125 m** | **4** |
| Greater Glider | | | | | 4 |
| Common Ringtail Possum | *Pseudocheirus peregrinus* | Unknown[8] | - | - | 5 |
| White-striped Mastiff Bat | *Tadarida australis* | N[15] | - | - | 2 |
| **Eastern Free-tail Bat** | ***Mormopterus norfolkensis*** | **N[15]** | **-** | **-** | **2** |
| Gould's Wattled Bat | *Chalinolobus gouldi* | N[15] | - | - | 2 |
| Chocolate Wattled Bat | *Chalinolobus morio* | N[15] | - | - | 2 |
| Eastern Forest Bat | *Vespadelus pumilus* | N[15] | - | - | 2 |
| Little Forest Bat | *Vespadelus vulturnus* | N[15] | - | - | 2 |
| Southern Forest Bat | *Vespadelus regulus* | N[15] | - | - | 2 |
| **Greater Broad-nosed Bat** | ***Scoteanax rueppellii*** | **Y[16]** | **Regional if maternity site** | **-** | **2** |
| Eastern Broad-nosed Bat | *Scotorepens orion* | N[15] | - | - | 2 |
| Lesser Long-eared Bat | *Nyctophilus geoffroyi* | N[15] | - | - | 2 |
| Gould's Long-eared Bat | *Nyctophilus gouldi* | N[15] | - | - | 2 |

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# 7.0 NEST BOX MANAGEMENT

The management of nest boxes forms part of the overall management of fauna for the Upgrading of the Pacific Highway from just south of Warrell Creek (Allgomera deviation) north the Waterfall Way, Raleigh.

### 7.1 When will the Nest Boxes be Installed?

The contractor will install 60% of the nominated nest boxes will be installed prior to or during the clearing works with the objective of providing temporal refuge habitat for those hollow dependent fauna displaced during clearing operations. The remaining 40% of nest boxes will be installed by the contractor once a final tally of functional tree hollows has been compiled and reviewed as a result of the data collected during the clearing supervision. Occupancy rates of tree hollows during the clearing supervision will also facilitate the final number and types of nest boxes being installed. Ultimately, the Project Ecologist will be responsible for determining these values as they will be performing the clearing supervision.

### 7.2 Monitoring and Maintenance

Roads and Maritime Services have committed to developing a suitable monitoring and maintenance strategy to evaluate the effectiveness of the nest boxes with this summarised in Table 7-1. As such, it will be important to assign each nest box a number and ensure its location is recorded using a GPS. It is proposed that summer and winter monitoring would take place shortly after the installation period (i.e. Year 3 and 4 of this plan) and this would continue in Year 6 and Year 8. An annual maintenance program will align with this monitoring program after which a pre handover maintenance inspection will be undertaken at Year 8 (Table 7-1).

During each monitoring event, the following information should be collected for each nest box using a field proforma:

- Inspection dates, weather conditions (i.e. rain, wind, cloud cover, ambient temperature) and time each box was inspected;
- Nest box number;
- Is the nest box currently occupied by native fauna;
- If yes, what species;
- If no, are there signs of use and can the species be identified or assigned to a group (i.e. bats, birds);
- Has the nest box been used by a pest species (i.e. European Bees, Common Myna, Termites);
- Is there any deterioration of the nest box;
- Is there any maintenance required; and
- Has the surrounding landscape changed (i.e. clearing, partial clearing).

Factors to be considered as part of the maintenance schedule include:

- The need to remove exotic pests species such as Common Mynas, Common Starling and European Bees;
- Replacement of fallen, damaged or degraded nest boxes;
- Repositioning or relocation of dysfunctional[4] nest boxes;
- Checking each box is not holding water or leaking; and
- Removing excess nesting material[5] as this may impede access over time.

[4] Dysfunctional for the purposes of the nest box monitoring program shall mean nest boxes that are showing no signs of use during the latter stages of the monitoring program (i.e. after 3 monitoring episodes).

[5] Build-up of nest material that threatens to block nest box entrance or create management problems as determined by the qualified zoologist undertaking the monitoring program.

**Table 7-1.** Timing of key actions for this nest box plan of management, responsibilities and documentation requirements.

| Management Action / Year Number | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | Year 7 | Year 8 | Responsibility | Documentation Requirements |
|---|---|---|---|---|---|---|---|---|---|---|
| **Pre Construction** | | | | | | | | | | |
| Prepare Nest Box Plan | √ | | | | | | | | RMS | Construction Environmental Management Plan |
| **Construction** | | | | | | | | | | |
| Commission Construction of Nest Boxes | √ | √ | | | | | | | Contractor | - |
| Install Nest Boxes | | √ | √ | | | | | | Contractor | Construction Environmental Management Plan |
| **Monitoring** | | | | | | | | | | |
| Summer | | | √ | √ | | √ | | √ | Contractor | Yearly reporting |
| Winter | | | √ | √ | | √ | | √ | Contractor | Yearly reporting |
| **Maintenance** | | | | | | | | | | |
| Maintenance of boxes | | | √ | | √ | | √ | | Contractor | |
| Pre Handover Maintenance Inspection | | | | | | | | √ | Contractor | Nest Box Reporting |

### 7.3 Performance Measures

The performance of the nest box program would be assessed against the following parameters:

- Use of nest boxes by a wide range of native fauna;
- Use of nest boxes designed for specific species by those species (i.e. Brush-tailed Phascogale nest box being used by this species);
- Low rates of exotic fauna using nest boxes; and
- Reduced maintenance requirements.

### 7.4 Contingency Measures

A number of contingency measures have been proposed to overcome potential problems associated with using nest boxes as a mitigation device. These have been summarised in Table 7-2.

**Table 7-2**. Potential problems encountered when using nest boxes as a mitigation tool to offset tree hollow losses.

| Problem | Contingency / Correction Action |
|---|---|
| Nest box being used by non target species. | Review the selection and number of nest box designs. |
| Nest boxes become occupied by exotic or invasive fauna (i.e. European Bees, Termites). | Review/modify nest box design to exclude undesirable species, treat if applicable (i.e. Buffalo Fly ear tags for bees) or relocate those nest boxes to another location. |
| Poor uptake/usage rate by native fauna. | Review the types and numbers of nest box designs. |
| Nest boxes deteriorating rapidly and requiring maintenance. | Identify causes of nest box failure, modify design and construct accordingly. |

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# APPENDIX A

## Hollow Dependant Fauna Recorded along the RMS Road Corridor

**Table A.** Summary of hollow dependant fauna recorded on or near to the Warrell Creek to Urunga.

Bold type denotes species currently listed as vulnerable pursuant to the NSW *Threatened Species Conservation* Act (1995).

* denotes introduced species.

| Family Name | Common Name | Scientific Name |
|---|---|---|
| **FROGS** | | |
| HYLIDAE | Common Green Tree Frog | *Litoria caerulea* |
| HYLIDAE | Bleating tree Frog | *Litoria dentata* |
| HYLIDAE | Eastern Dwarf Frog | *Litoria fallax* |
| HYLIDAE | Graceful Tree Frog | *Litoria gracilenta* |
| HYLIDAE | Peron's Tree Frog | *Litoria peronii* |
| HYLIDAE | Red-eyed Tree Frog | *Litoria chloris* |
| HYLIDAE | Tyler's Tree Frog | *Litoria tyleri* |
| **REPTILES** | | |
| GECKONIDAE | Southern Leaf-tailed Gecko | *Saltuarius swaini* |
| VARANIDAE | Lace Monitor | *Varanus varius* |
| SCINCIDAE | Tree Skink | *Egernia mcpheei* |
| SCINCIDAE | Bar-sided Skink | *Eulamprus martini* |
| PYTHONIDAE | Carpet Python | *Morelia spilota* |
| COLUBRIDAE | Green Tree Snake | *Dendrelaphis punctulata* |
| **MAMMALS** | | |
| **DASYURIDAE** | **Brush-tailed Phascogale** | ***Phascogale tapoatafa*** |
| DASYURIDAE | Brown Antechinus | *Antechinus stuartii* |
| **PETAUROIDEA** | **Yellow-bellied Glider** | ***Petaurus australis*** |
| **PETAUROIDEA** | **Squirrel Glider** | ***Petaurus norfolcensis*** |
| PETAUROIDEA | Sugar Glider | *Petaurus breviceps* |
| PETAUROIDEA | Greater Glider | *Petauroides volans* |
| PSEUDOCHEIRIDAE | Common Ringtail Possum | *Pseudocheirus peregrinus* |
| ACROBATIDAE | Feather-tail Glider | *Acrobates pygmaeus* |
| PHALANGERIDAE | Common Brushtail possum | *Trichosurus vulpecula* |
| PHALANGERIDAE | Short-eared Brushtail possum | *Trichosurus caninus* |
| VESPERTILIONIDAE | Chocolate Wattle Bat | *Chalinolobus morio* |
| VESPERTILIONIDAE | Gould's Wattled Bat | *Chalinolobus gouldi* |
| **VESPERTILIONIDAE** | **Hoary Wattled Bat** | ***Chalinolobus nigrogriseus*** |
| VESPERTILIONIDAE | Eastern Broad-nosed Bat | *Scotorepens orion* |
| VESPERTILIONIDAE | Undescribed Broad-nosed Bat | *Scotorepens sp* |
| VESPERTILIONIDAE | Eastern Forest Bat | *Vespadelus pumulis* |
| VESPERTILIONIDAE | Southern Forest Bat | *Vespadelus regulus* |
| VESPERTILIONIDAE | Southern Forest Bat | *Vespadelus vulturnus* |
| **VESPERTILIONIDAE** | **Little Bent-wing Bat** | ***Miniopterus australis*** |
| **VESPERTILIONIDAE** | **Southern Myotis** | ***Myotis macropus*** |
| **VESPERTILIONIDAE** | **Greater Broad-nosed Bat** | ***Scoteanax rueppellii*** |
| **VESPERTILIONIDAE** | **Eastern False Pipistrelle** | ***Falsistrellus tasmaniensis*** |
| VESPERTILIONIDAE | Lesser long-eared Bat | *Nyctophilus geoffroyi* |

| Family Name | Common Name | Scientific Name |
|---|---|---|
| VESPERTILIONIDAE | Gould's Long-eared Bat | *Nyctophilus gouldi* |
| MOLOSSIDAE | Little Free-tail Bat | *Mormopterus sp. 2* |
| MOLOSSIDAE | White-striped Mastiff Bat | *Tadarida australis* |
| **BIRDS** | | |
| ANATIDAE | Hardhead | *Aythya australis* |
| ANATIDAE | Pacific Black Duck | *Anas superciliosa* |
| ANATIDAE | Wood Duck | *Chenonetta jubata* |
| ANATIDAE | Grey Teal | *Anas gracilis* |
| ANATIDAE | Chestnut Teal | *Anas castanea* |
| **CACATUIDAE** | **Glossy Black Cockatoo** | *Calyptorhynchus lathami* |
| CACATUIDAE | Yellow-tailed Black Cockatoo | *Calyptorhynchus funereus* |
| CACATUIDAE | Galah | *Cacatua rosicapilla* |
| PSITTACIDAE | Rainbow Lorikeet | *Trichoglossus haematodus* |
| PSITTACIDAE | Scaly Breasted Lorikeet | *Trichoglossus chlorolepidotus* |
| **PSITTACIDAE** | **Little Lorikeet** | ***Glossopsitta pusilla*** |
| PSITTACIDAE | Musk Lorikeet | *Glossopsitta concinna* |
| PSITTACIDAE | Australian King Parrot | *Alisterus scapularis* |
| PSITTACIDAE | Eastern Rosella | *Platycercus eximius* |
| STRIGIDAE | Southern Boobook | *Ninox novaeseelandiae* |
| **STRIGIDAE** | **Powerful Owl** | ***Ninox strenua*** |
| **TYTONIDAE** | **Masked Owl** | ***Tyto novaehollandiae*** |
| **TYTONIDAE** | **Sooty Owl** | ***Tyto tenebricosa*** |
| TYTONIDAE | Barn Owl | *Tyto alba* |
| AEGOTHELIDAE | Australian Owlet Nightjar | *Aegotheles cristatus* |
| CAPRIMULGIDAE | White-throated Nightjar | *Eurostopodus mystacalis* |
| ALCEDINIDAE | Laughing Kookaburra | *Dacelo novaeguineae* |
| ALCEDINIDAE | Sacred Kingfisher | *Todiramphus sanctus* |
| ALCEDINIDAE | Forest Kingfisher | *Todiramphus macleayii* |
| CORACIIDAE | Dollarbird | *Eurystomus orientalis* |
| CLIMACTERIDAE | White-throated treecreeper | *Cormobates leucophaeus* |
| PARDALOTIDAE | Striated Pardalote | *Pardolotus striatus* |
| PARDALOTIDAE | Spotted Pardalote | *Pardolotus punctatus* |
| STURNIDAE | Common Starling * | *Sturnus vulgaris ** |
| STURNIDAE | Common Myna * | *Acridotheres tristis ** |

# APPENDIX B

Ecology of Relevant Hollow Dependant Fauna

**Table B.** Summary of hollow dependant fauna species known from the lower foothills and coastal plans of the Nambucca and Kalang Valley.

M = Metres, MM = Millimetre, DBH = Diameter at breast height.

| Fauna Group<br>Common Name<br>(Latin Name) | Habitat | Tree hollow characteristics (Gibbons and Lindenmayer 2003) | | | | | Comment |
|---|---|---|---|---|---|---|---|
| | | Den tree type | Height (m) | Entrance diameter (mm) | Depth (mm) | Density of hollow use within home range | |
| **Mammals** | | | | | | | |
| **Scansorial mammals** | | | | | | | |
| Brush-tailed Phascogale (*Phascogale tapoatafa*) | Largely an arboreal inhabitant of dry sclerophyll forests and woodlands with little/sparse ground cover. It uses multiple den sites usually a tree hollow but also known to use rotted stumps and bird nests. Forages on arthropods and small vertebrates over variable home range of 5-100 ha depending on habitat quality (Soderquist and Rhind 2008). | Rough barked trees of ≥250 mm DBH | | | | | Large tree cavities with small secure entrances are preferred (Soderquist and Rhind 2008). |
| Brown Antechinus (*Antechinus stuartii*) | Widespread in a variety of forested and heathland habitats reaching its highest density in habitats with dense groundcover and abundant logs. Nests are constructed in hollow log or tree hollow when young reach 5 weeks old (Crowther and Braithwaite 2008) | | | | | | Likely to use a range of nest box types. |
| **Small Gliders** | | | | | | | |
| Feather-tail Glider (*Acrobates pygmaeus*) | Widely distributed throughout tall forests and woodlands of eastern Australia with home range of up to 2.1 ha (Ward and Woodside 2008). Normally den in groups of 3-5 individuals with observations of up to 25 individuals. | 400-2000 mm DBH | 25 | 120 | 920 | | Known for utilising any available enclosed space including tree hollows, telephone interchange boxes, bird boxes, old bird nests or abandoned possum drays Ward and Woodside 2008). |

| Fauna Group<br>Common Name<br>(Latin Name) | Habitat | Tree hollow characteristics (Gibbons and Lindenmayer 2003) | | | | | Comment |
|---|---|---|---|---|---|---|---|
| | | Den tree type | Height (m) | Entrance diameter (mm) | Depth (mm) | Density of hollow use within home range | |
| Sugar Glider (*Petaurus breviceps*) | Found in variety of habitats including rainforest, sclerophyll forests and woodland habitats of eastern and northern Australia (Suckling 2008). Highest densities tend to occur in open forest habitats where animals have access to dense patches of *Acacia* (Suckling 2008). | >300 mm DBH | 8 -31 | 35-50 | 60-700 | <5 | It seems to tolerant some level of habitat fragmentation being often road in linear strips of vegetation and has been successfully introduced in rehabilitated habitats augmented with nest boxes. |
| **Large Gliders** | | | | | | | |
| Squirrel Glider (*Petaurus norfolcensis*) | Inhabitant of dry sclerophyll forest and woodland but usually absent from dense coastal ranges of NSW. Such habitats tend to have *Eucalyptus*, *Corymbia*, *Angophora* species with a shrubby understorey of Acacia or Banksia with at least one winter flowering species providing an important nectar source (van der Ree and Suckling 2008) | Rough barked trees including Ironbarks and Swamp Mahogany<br>900mm DBH | | | | | Usually select multiple tree hollows with a tight fitting entrance. |
| Yellow-bellied Glider (*Petaurus australis*) | Generally restricted to tall, mature eucalypt forest and coastal woodlands in high rainfall areas of temperate to sub-tropical eastern Australia (NPWS 2003; Menkhorst and Knight 2003). A family group of two to six individuals usually occupy a home range of 30-60 ha (Goldingay 2008). Tree hollows are used for denning and these are changed periodically throughout the year. | 800-2000 mm DBH | 44 | 110 - 140 | 1300 | 6 - 13 | These gliders require large hollows because family groups share den sites (Gibbons and Lindenmayer 2003). |
| Greater Glider (*Petauroides volans*) | An inhabitant of Eucalypt, *Corymbia* and *Angophora* dominated habitats from low open forests on the coast to tall closed forest of the coastal ranges and along riparian corridor and woodlands west of the dividing range (McKay 2008). | >1m DBH | 11 | 180 | | 2 - 14 | |
| **Possums** | | | | | | | |
| Common Ringtail Possum (*Pseudocheirus peregrinus*) | Occupant of usually dense vegetation types including rainforest where shrubs form dense tangled foliage although inhabitant riparian woodland vegetation west of the dividing range. Spherical nests lined with shredded bark or grass are made in a hollow limb or dense undergrowth (McKay and Ong 2008). | 100 - 1430 DBH | 4 | 66-80 | > 200 | 8 | Ringtail possums inhabiting areas with dense understorey vegetation are more likely to build drays from sticks and vegetative matters as a shelter in preference to tree hollows (McKay and Ong 2008). |

| Fauna Group<br>Common Name<br>(Latin Name) | Habitat | Tree hollow characteristics (Gibbons and Lindenmayer 2003) | | | | | Comment |
|---|---|---|---|---|---|---|---|
| | | Den tree type | Height (m) | Entrance diameter (mm) | Depth (mm) | Density of hollow use within home range | |
| Common Brushtail Possum (*Trichosurus vulpecula*) | Widely distributed throughout Australia, however, sclerophyll forests tend to be the preferred habitat (Kearle and How 2008). Although tree hollows are the usually den location in either tree limb or trunk individuals have been recorded using termite mounds, hollow logs and rabbit warrens (Kearle and How 2008). | 550-1150 mm DBH | 6 | > 100 | 90-120 | 4 - 8 | The generalist denning habits of this species suggest alternative nesting resources should be an effective substitute for the loss of tree hollow habitat. |
| Short-eared Brushtail Possum (*Trichosurus caninus*) | An inhabitant of moist forests north from about Newcastle (How 2008). It reaches its peak density of 1 individual per 10 ha in forest gullies with abundant tree hollows in north eastern NSW (Martin 2008). Den site selection is normally in a live or dead tree although it has been known to utilise epiphytes. | 550-1150 mm DBH | 6 | > 100 | 90-120 | 4 - 8 | |
| **Flying Mammals** | | | | | | | |
| Microchiropteran bats<br>(i.e. East Coast Free-tail Bat, Greater Broad-nosed Bat, Large-footed Myotis) | No preferred hollow characteristics are apparent among bats and both natural and man-made structures are used. However some species of microchiroptera are partly heterothermic suggesting that their selection of roost sites is strongly influenced by microclimatic conditions (Gibbons and Lindenmayer 2003).<br>Bat species have been known to show fidelity to a roost area, rather than a single roost (Gibbons and Lindenmayer 2003) which may indicate the substitution of natural hollows with nest boxes will not greatly influence local populations of this fauna group. | Mature, senescent or dead trees > 800 mm DBH. | | | | | Been recorded using roost trees as small as 25 mm. |
| **Birds** | | | | | | | |
| **Ducks** | | | | | | | |
| Australian Wood Duck (*Chenonetta jubata*) | An inhabitant of grasslands, open woodlands, wetlands, flooded pastures and coastal inlets and bays. Also common on farmland with dams, as well as around rice fields, sewage ponds and in urban parks. Often be found around deeper lakes that may be unsuitable for other waterbirds, as it prefers to forage on land (Pizzey and Knight 2008). | Live or dead tress above or near water | 3 | | 400 | | Often re-using the same site. |

| Fauna Group<br>Common Name<br>(Latin Name) | Habitat | Tree hollow characteristics (Gibbons and Lindenmayer 2003) | | | | | Comment |
|---|---|---|---|---|---|---|---|
| | | Den tree type | Height (m) | Entrance diameter (mm) | Depth (mm) | Density of hollow use within home range | |
| Grey Teal (*Anas gracilis*) | Common inhabitant of all sheltered watered areas ranging from freshwater to saltwater. It preferred habitat tends to be timbered pools and river systems of the inland areas, where large aggregations numbers thousands are not uncommon (Marchant and Higgins 1993). | Usually tall tree along watercourse | 3.5 | | 1300 | | Rarely on ground, under shrubs or bushes. |
| Chestnut Teal (*Anas castanea*) | Inhabitant of wetlands and estuaries in coastal regions, and is one of the few ducks able to tolerate hyper saline waters, although it still needs fresh water for drinking. It will also use open freshwater lakes, reservoirs and sewage ponds during dry seasons. It mainly breeds in coastal areas, needing hollow trees in water or short grasslands near water for nesting, and it will readily take to suitably constructed nest boxes (Marchant and Higgins 1993; Pizzey and Knight 2008). | Close to water | 1-10.5 | | | | Nest sites tend to be lower in mangrove communities |
| **Cockatoos** | | | | | | | |
| Glossy Black Cockatoo (*Calyptorhynchus lathami*) | In coastal parts of NSW the preferred habitat for Glossy Black Cockatoo is dry open forest or woodland with a plentiful supply of *Allocasuarina* species for foraging, and large hollows for nesting (Pepper *et al.* 2000). Glossy Black Cockatoos are selective in their choice of foraging sites and chose stands that produce the highest seed to cone ratio (Pepper *et al.* 2000). Typically nest sites occur close (<2 km) to areas with a plentiful supply of *Allocasuarina*. | Live or dead Eucalypt >700mm DBH usually <1km from feeding area. | 5-28 | 210 | 400-1200 | | Known to use nest boxes constructed from hollow logs. |
| Yellow-tailed Black Cockatoo (*Calyptorhynchus funereus*) | The Yellow-tailed Black Cockatoo inhabits temperate rainforest, sclerophyll forests, woodlands and coastal heaths throughout eastern Australia (Pizzey and Knight 2008). It has a varied diet of grubs, seeds from *Pinus*, *Hakea*, *Banksia* and other plants, fruits and plant shoots. Breeding usually takes place in a large senescent eucalypt of considerable age (Nelson and Morris 1994). | Hollow in mature senescent tree | 5-56 | 460 | 600-2400 | | Mean estimated age of nest trees used by Yellow-tailed Black Cockatoo 221 years (Nelson and Morris 1994) |
| Sulphur Crested Cockatoo (*Cacatua galerita*) | Inhabitant of most forested and wooded areas including urban areas (Pizzey and Knight 2008). Tend to display sedentary habits. | Hollow in limb or trunk of dead or living tree often near water | 1-35 | 220 | 200-1800 | | |

| Fauna Group<br>Common Name<br>(Latin Name) | Habitat | Tree hollow characteristics (Gibbons and Lindenmayer 2003) | | | | | Comment |
|---|---|---|---|---|---|---|---|
| | | Den tree type | Height (m) | Entrance diameter (mm) | Depth (mm) | Density of hollow use within home range | |
| Galah (*Cacatua roseicapilla*) | Inhabitant of most forested and wooded areas including urban areas often close to water (Pizzey and Knight 2008). Seeds of grasses and cultivated crops are eaten, making these birds agricultural pests in some areas where they are often described as abundant. Birds may travel large distances in search of favorable feeding grounds. | Hollow in limb or trunk of dead or living tree often near water | 1-19 | 250 | 700-2000 | | |
| **Forest Owls** | | | | | | | |
| Powerful Owl (*Ninox Strenua*) | An inhabitant of sclerophyll forests and occasionally woodlands of eastern and south-eastern Australia (Pizzey and Knight 2008). Studies suggest it is highly mobile species occupying large home ranges of approximately 1000-3000 ha in tall sclerophyll forests with pairs of birds holding territories are rarely found within 4-5 kilometres of another territory. The Powerful Owl often nests in trees growing near creeks along drainage lines (McNabb 1996; Kavanagh 1997) and have occasionally been recorded nesting in parkland next to forest (Pavey *et al.* 1994). Roost sites are traditional and used year after year but the number of roost sites can vary considerably (e.g. McNabb 1996, Kavanagh 1997). Kavanagh (1997) found the most important roost sites are trees in the roost or nest-grove which can be used for many months of the year. Prey are generally hollow dwelling (Garnett and Crowley 2000). | > 1m DBH located on steep slopes | 12 - 45 | 450 -750 | 2000 | | Feather identified as belong to this species off this species was recorded in the vicinity of chainage 8420 during the hollow bearing tree survey. There has been no record of this species utilising artificial nest boxes (Carbery 2004). |
| Masked Owl (*Tyto novaehollandiae*) | Inhabitant of dry sclerophyll forests and woodlands generally with a low sparse understorey but is known to utilise open and partially cleared habitat (Kavanagh and Peake 1993). This species is mainly encountered in coastal areas and tablelands but can extend far inland along riparian habitats. Nest and roost sites are often associated with large hollows in wet sclerophyll gullies where hollows may be used for several years. | | 10 - 30 | 450 - 550 | 400-5000 | | The Masked Owl may also roost in caves and rock crevices (Gibbons and Lindenmayer 1997). There has been no record of this species utilising artificial nest boxes (Carbery 2004). |

| Fauna Group<br>Common Name<br>(Latin Name) | Habitat | Tree hollow characteristics (Gibbons and Lindenmayer 2003) | | | | | Comment |
|---|---|---|---|---|---|---|---|
| | | Den tree type | Height (m) | Entrance diameter (mm) | Depth (mm) | Density of hollow use within home range | |
| Sooty Owl (*Tyto tenebricosa*) | Occurs in wet eucalypt forest and rainforest on fertile soils with tall emergent trees. Typically found in old growth forest with a dense understorey, however, it is known to utilise younger forests if suitable nesting trees occur nearby. Nest site selection is normally within a large eucalypt hollow (Garnett and Crowley 2000). | Smooth barked eucalypts 400-600 mm DBH | 16 - 30 | | 400- 3000 | | The Sooty Owl may also roost in caves, rock overhangs and dense gully vegetation (Gibbons and Lindenmayer 1997). There has been no record of this species utilising artificial nest boxes (Carbery 2004). |
| **Small Owls** | | | | | | | |
| Southern Boobook (*Ninox novaeseelandiae*) | Inhabits most vegetated landscapes from heathlands to dense forest and open deserts where it often feeds on insects, small mammals (such as the House Mouse, *Mus musculus* and small dasyurids) along with other small animals including frogs (Pizzey and Knight 2008). | Vertical hollow in live or dead tree | 3-30 | 200-300 | 300-2500 | | |
| Barn Owl (*Tyto alba*) | This species is found throughout Australia where its distribution is limited only by habitat and food availability (Pizzey and Knight 2008). Its preferred habitat is open, often arid landscapes, fragmented farming landscapes, heath and lightly wooded forest. | Hollow in live or dead tree | 0-20 | 200-250 | 600-2000 | | |
| Australian Owlet Nightjar (*Aegothesles cristatus*) | Most treed habitats that support tree hollows and nearby adjacent areas. During the day this species roosts in a limb or trunk hollow (Pizzey and Knight 2008). | Hollow in live or dead tree | 0.2-30 | 70-250 | 200-3500 | | May use multiple roost hollows over short periods (Brigham *et al.* 1998) |
| **Parrots/Lorikeets & Rosellas** | | | | | | | |
| Australian King Parrot (*Alisterus scapularis*) | An inhabitant of rainforests, sclerophyll forests and woodlands particularly near riparian habitats where it forages for seeds and fruits (Pizzey and Knight 2008). | Deep vertical hollow in trunk of large Eucalypt | 6-25 | 600 | 50-18000 | | |
| Rainbow Lorikeet (*Trichoglossus haematodus)* | This species inhabits a range of treed landscapes from heathlands to woodlands, sclerophyll forests and rainforests (Pizzey and Knight 2008). It is largely sedentary although some nomadic movements are undertaken in response to seasonal flowering and fruiting of plants. | Live or dead tree | 3-30 | 220 | 300-600 | | Will readily use artificial sites |

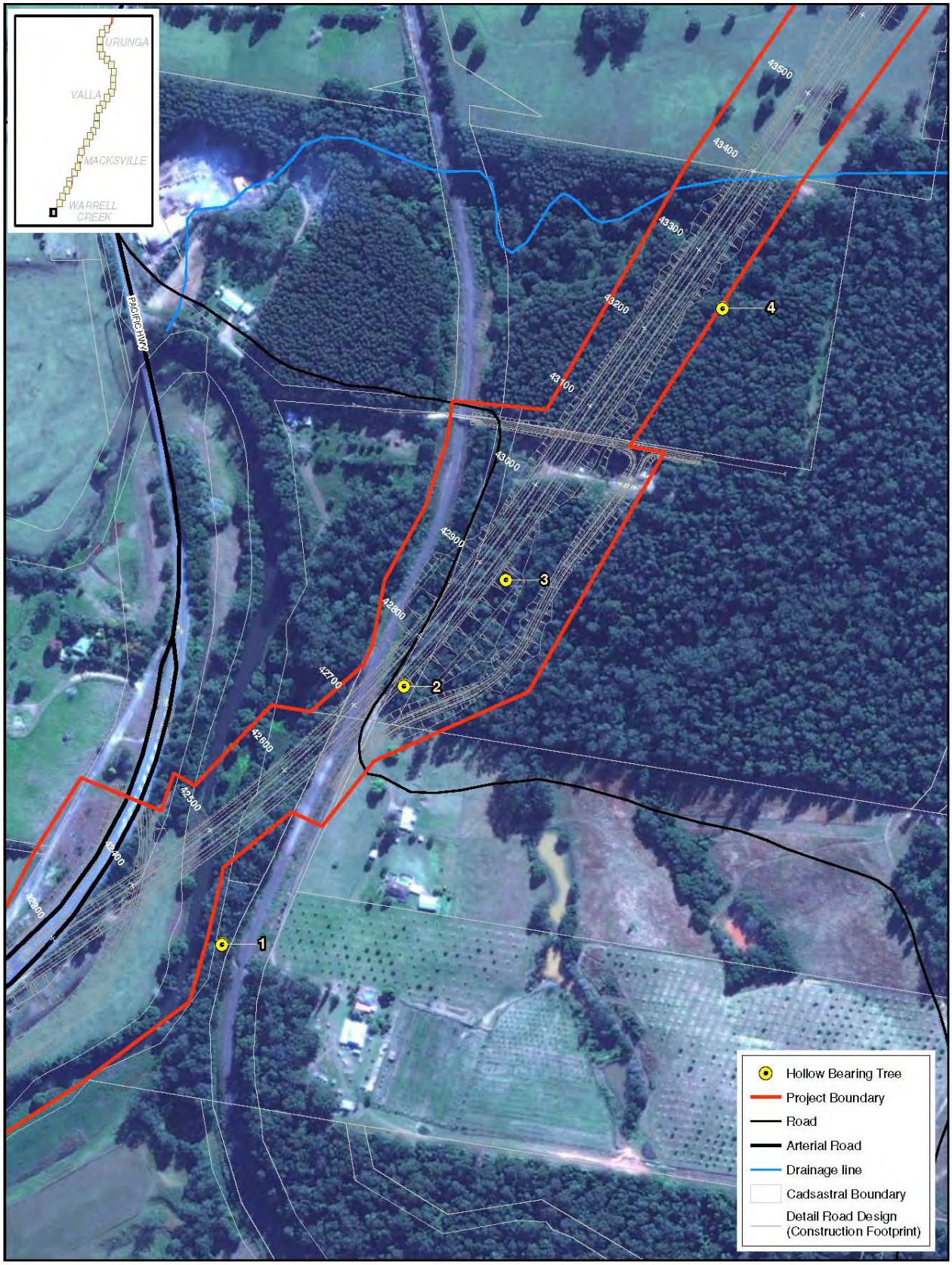
| Fauna Group<br>Common Name<br>(Latin Name) | Habitat | Tree hollow characteristics (Gibbons and Lindenmayer 2003) | | | | | |
|---|---|---|---|---|---|---|---|
| | | Den tree type | Height (m) | Entrance diameter (mm) | Depth (mm) | Density of hollow use within home range | |
| Musk Lorikeet (*Glossopsitta concinna*) | A nomadic species following the flowering and fruiting of trees in tall, open and dry forest or woodlands dominated by eucalypts and *Corymbia*. Treed suburban areas, parks and landscaped street trees are also used. This species may also feed upon the seeds, fruits and insects and their larvae found within its preferred habitat. | Live or dead tree often close to water | 3-8 | 40 | 500 | | |
| Scaly-breasted Lorikeet (*Trichoglossus chlorolepidotus*) | This species inhabits lowland eucalypt forests, woodlands heathlands and well-treed urban areas, including parks and gardens (Pizzey and Knight 2008). Numbers within any particular area often fluctuate in response to seasonal flowering of eucalypts, *Melaleuca*, *Callistemon* and *Banksia*. | Live or dead tree with an inclined hollow | 3-20 | 50-150 | 200-1980 | | |
| Little Lorikeet (*Glossopsitta pusilla*) | A nomadic species that mostly occurs in dry, open eucalypt forests and woodlands (Pizzey and Knight 2008). They have been recorded from both old-growth and logged forests in the eastern part of their range, and in remnant woodland patches and roadside vegetation on the western slopes. | Hollows and knot holes usually in senescent trees | 6-18 | 29-32 | 180-500 | | Very small entrance used. |
| Eastern Rosella (*Platycercus eximius*) | An inhabitant of open woodlands, grasslands, farmlands and remnant bushland. May also occur in urban habitats such as parks, gardens and golf courses (Pizzey and Knight 2008).Within these habitats it forages on the ground, especially amongst grasses in lawns, pastures and other clearings. | Hollow in any part of usually large Eucalypt | 1-30 | 60-410 | 180-2440 | | Will utilise artificial structures. |
| **Kookaburra/Kingfishers** | | | | | | | |
| Laughing kookaburra (*Dacelo novaeguineae*) | Open Sclerophyll forest or woodland, with open or sparse understorey or grass ground cover (Pizzey and Knight 2008). | Live or dead tree often a Eucalypt | 2-60 | 80-400 | 200-1500 | | Often utilises burrows and termitaria as well as artificial sites. |
| Sacred Kingfisher (*Todiramphus sanctus*) | An inhabitant of woodlands, mangroves and paperback forests, tall open eucalypt forest and *Melaleuca* forest. Sacred Kingfishers spend the winter in the north of their range and return south (including NSW) in the spring to breed (Pizzey and Knight 2008). | | 0.5-35 | | | | Often utilises burrows and termitaria. |

| Fauna Group<br>Common Name<br>(Latin Name) | Habitat | Tree hollow characteristics (Gibbons and Lindenmayer 2003) | | | | | Comment |
|---|---|---|---|---|---|---|---|
| | | Den tree type | Height (m) | Entrance diameter (mm) | Depth (mm) | Density of hollow use within home range | |
| Dollarbird (*Eurystomus orientalis*) | An inhabitant of open wooded areas, normally with mature, hollow-bearing trees suitable for nesting (Pizzey and Knight 2008). | Mostly in senescent Eucalypt | 6-35 | | | | May occasionally use termitaria. |
| White-throated Treecreeper (*Cormobates leucophaeus*) | An inhabitant of sclerophyll forests, rainforests, woodlands and timbered watercourses where it maintains permanent territories (Pizzey and Knight 2008). | | 4-5 | | | | |
| Striated Pardalote (*Pardolotus* striatus) | Striated Pardalotes are found in almost any habitat with trees or shrubs, but favor eucalypt forests and woodlands where they forage in the tops of trees, occasionally coming close to the ground in low shrubs (Pizzey and Knight 2008). | Maybe a burrow in a termite mound, hollow branch or river bank. | | | | | Often nests in burrows constructed in roadside cuttings, riverbanks and steep hillsides. |
| **Reptiles** | | | | | | | |
| Southern Leaf-tailed Gecko (*Phyllurus platurus*) | Sclerophyll forests, rainforests often with exposed rock and/or abundant fallen timber and old growth trees. | Under rock or exfoliating bark or tree hollow | | | | | Nothing known of its hollow habits. |
| Tree Skink (*Egernia mcpheei*) | Arboreal inhabitant of sclerophyll forests, rainforest margins and woodlands from coastal floodplains to upland areas of the Great Dividing Range (Wilson and Swan (2004). | Under rock or exfoliating bark or tree hollow, particularly fissures on dead stags | | | | | Little known on its hollow habits. |
| Lace Monitor (*Varanus varius*) | Arboreal inhabitant of sclerophyll forests, rainforest margins and woodlands (Wilson and Swan (2004). | Hollows with nearby large limbs for sunning | 1->10m | >150 | >300 | | |
| **Frogs** | | | | | | | |
| | | | | | | | |
| Bleating Tree Frog (*Litoria dentata*) | Coastal swamps and lagoons, rainforests, wet and dry sclerophyll forests and urban bushland. During the day it often hides beneath stones and bark (Barker *et al.* 1995). | Any hollow form but particular those that hold water | | | | | |

| Fauna Group<br>Common Name<br>(Latin Name) | Habitat | Tree hollow characteristics (Gibbons and Lindenmayer 2003) | | | | | Comment |
|---|---|---|---|---|---|---|---|
| | | Den tree type | Height (m) | Entrance diameter (mm) | Depth (mm) | Density of hollow use within home range | |
| Common Green Tree Frog (*Litoria caerulea*) | Inhabitant of forests, woodlands, shrublands and open areas. Tends to take refuge in tree hollows, cracks and beneath exfoliating bark and occasionally under rocks (Barker *et al.* 1995). | Any hollow form but particular those that hold water | | | | | |
| Eastern Dwarf Frog (*Litoria fallax*) | Inhabitant of sclerophyll forest and occasionally rainforest and coastal heaths and woodlands where it normally occurs in permanent dams, swamps and ponds (Barker *et al.* 1995). | Mainly foliage but known to use tree hollows | | | | | |
| Graceful Tree Frog (*Litoria gracilenta*) | Inhabitant of mainly moist forest associated along coastal seaboard where it normally selects permanent dams, swamps and ponds for breeding (Barker *et al.* 1995). | Mainly foliage but known to use tree hollows | | | | | |
| Perons Tree Frog (*Litoria peronii*) | Inhabitant of forests, woodlands, shrublands and open areas. Tends to take refuge in tree hollows, cracks and beneath exfoliating bark (Barker *et al.* 1995). | Any hollow form but particular those that hold water | Ground level to >10 m | 20-400 | 50-750 | | |
| Tyler's Tree Frog (*Litoria tyleri*) | Inhabitant of sclerophyll forest and occasionally rainforest and coastal heaths and woodlands where it normally occurs a short distance from permanent dams, swamps and ponds (Barker *et al.* 1995). | Any hollow form but particular those that hold water | | | | | |

# APPENDIX C

## Hollow Bearing Tree Locations and Tree Hollow Field data




## Figure 2 : HOLLOW BEARING TREES

Source:
Cadastre: Roads and Traffic Authority 2007
HBT Survey: Lewis Ecological Surveys April 2012
Roads: Geoscience Australia 2009
Highway Design (footprint): RTA 2011
Project Boundary: RTA 2011
Drainage: Geoscience Australia 2009
State Forests: NSW DPI 2008

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0 50 100 150 200 250
Meters

A4 Scale 1:5,000

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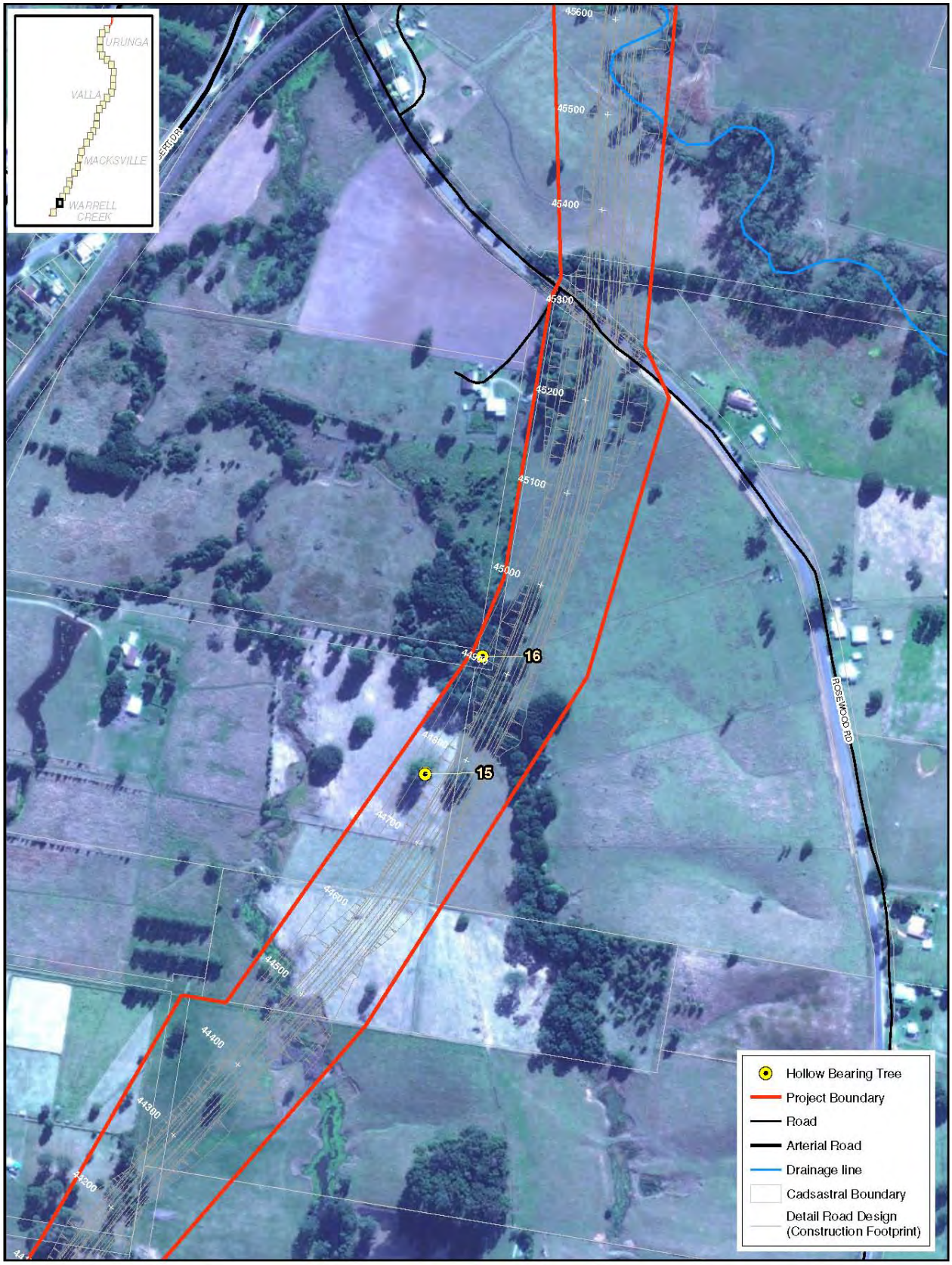


**Figure 3 : HOLLOW BEARING TREES**

Source:
Cadastre: Roads and Traffic Authority 2007
HBT Survey: Lewis Ecological Surveys April 2012
Roads: Geoscience Australia 2009
Highway Design (footprint): RTA 2011
Project Boundary: RTA 2011
Drainage: Geoscience Australia 2009
State Forests: NSW DPI 2008

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0 50 100 150 200 250
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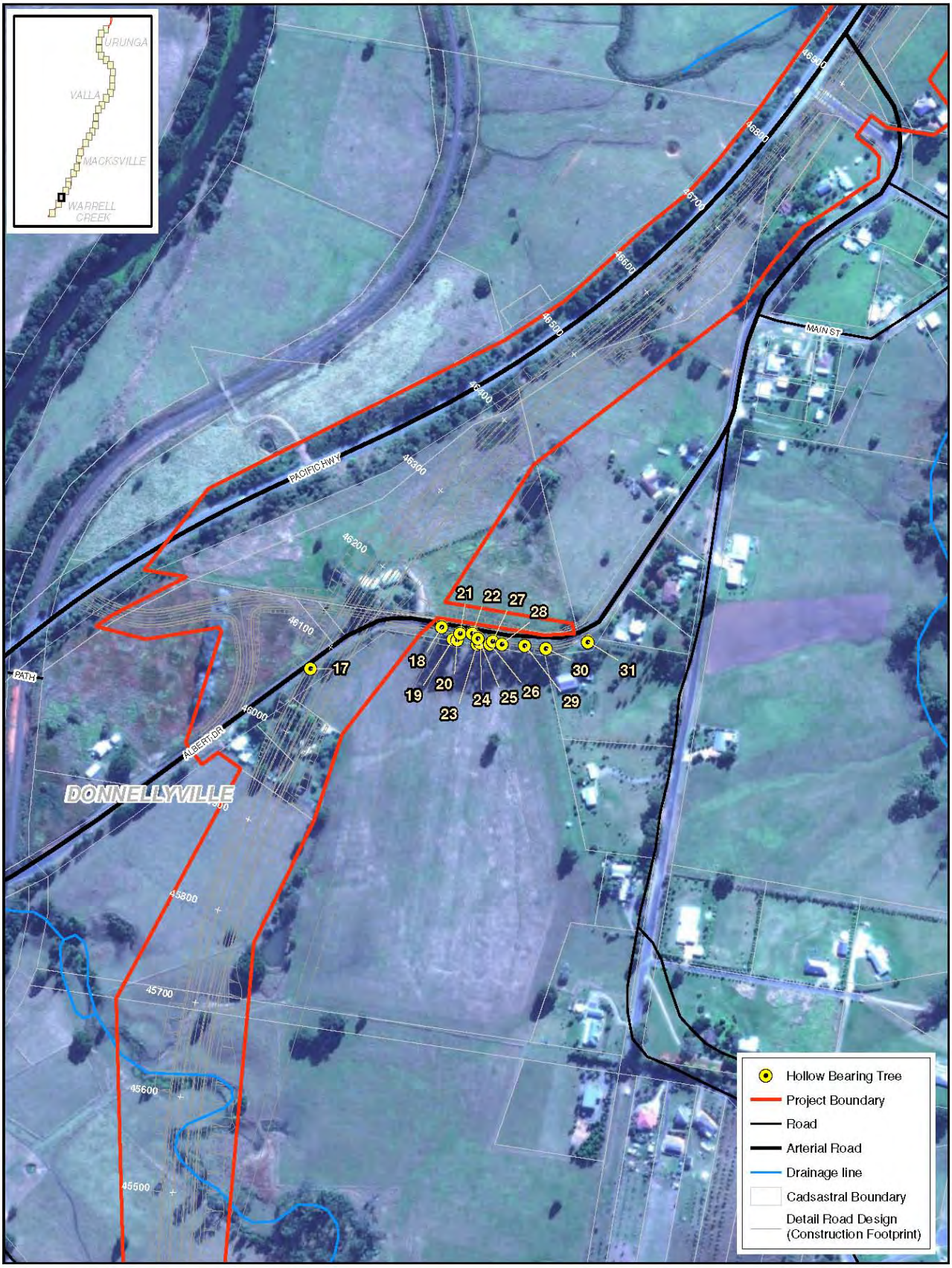


**Figure 4 : HOLLOW BEARING TREES**

Source:
Cadastre: Roads and Traffic Authority 2007
HBT Survey: Lewis Ecological Surveys April 2012
Roads: Geoscience Australia 2009
Highway Design (footprint): RTA 2011
Project Boundary: RTA 2011
Drainage: Geoscience Australia 2009
State Forests: NSW DPI 2008

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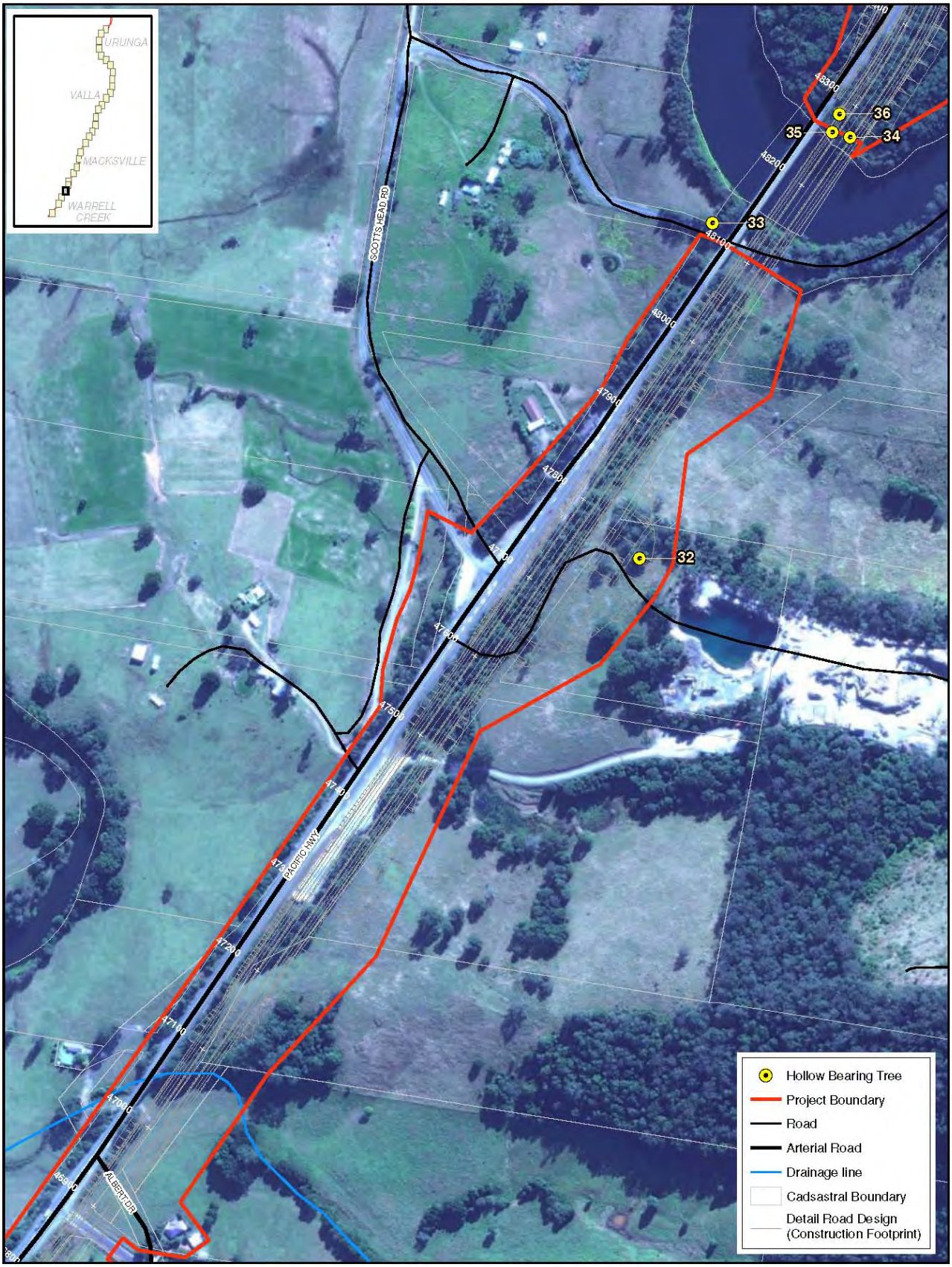


**Figure 5 : HOLLOW BEARING TREES**

Source:
Cadastre: Roads and Traffic Authority 2007
HBT Survey: Lewis Ecological Surveys April 2012
Roads: Geoscience Australia 2009
Highway Design (footprint): RTA 2011
Project Boundary: RTA 2011
Drainage: Geoscience Australia 2009
State Forests: NSW DPI 2008

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0 50 100 150 200 250 Meters

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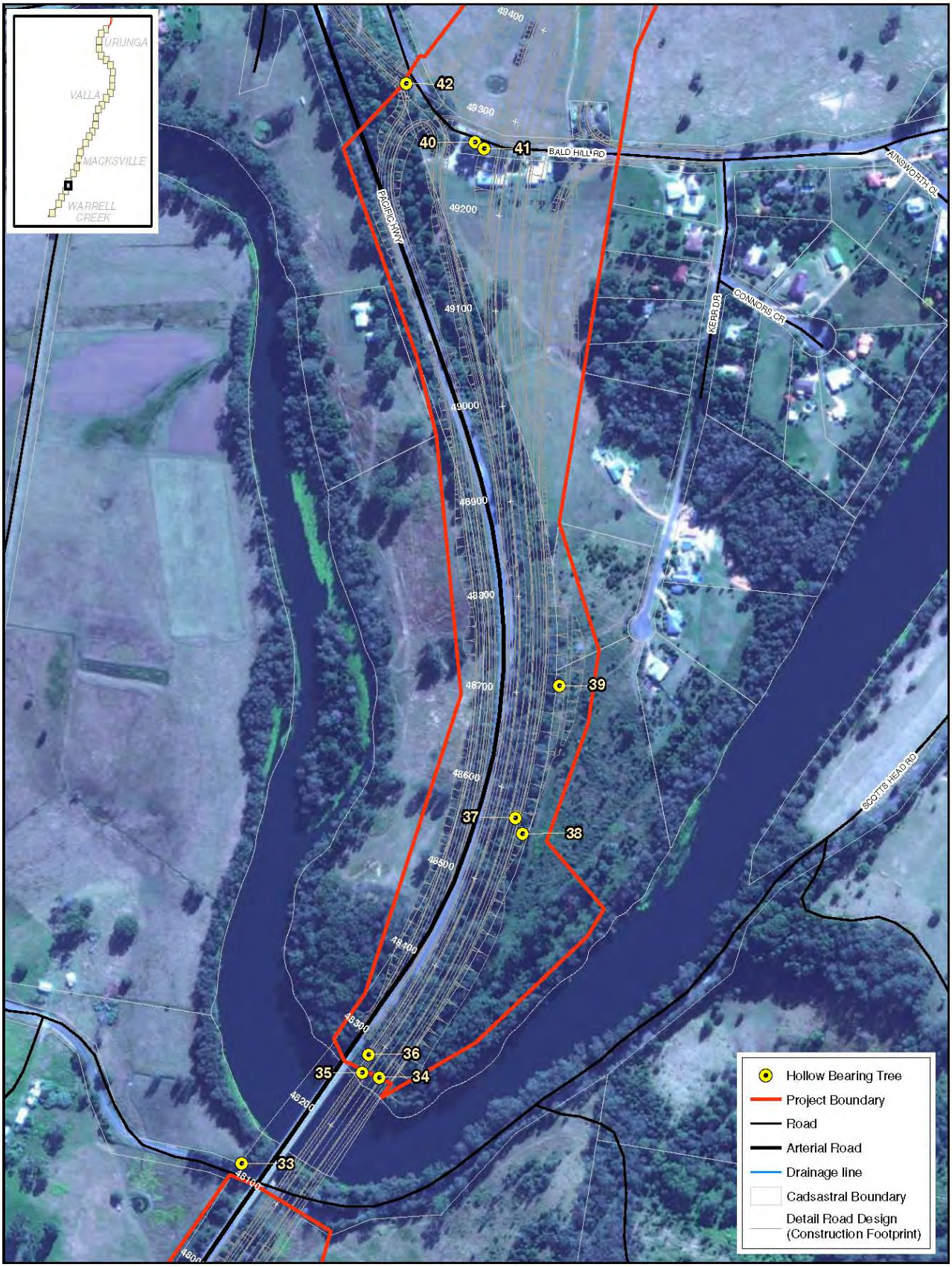


**Figure 6 : HOLLOW BEARING TREES**

Source:
Cadastre: Roads and Traffic Authority 2007
HBT Survey: Lewis Ecological Surveys April 2012
Roads: Geoscience Australia 2009
Highway Design (footprint): RTA 2011
Project Boundary: RTA 2011
Drainage: Geoscience Australia 2009
State Forests: NSW DPI 2008

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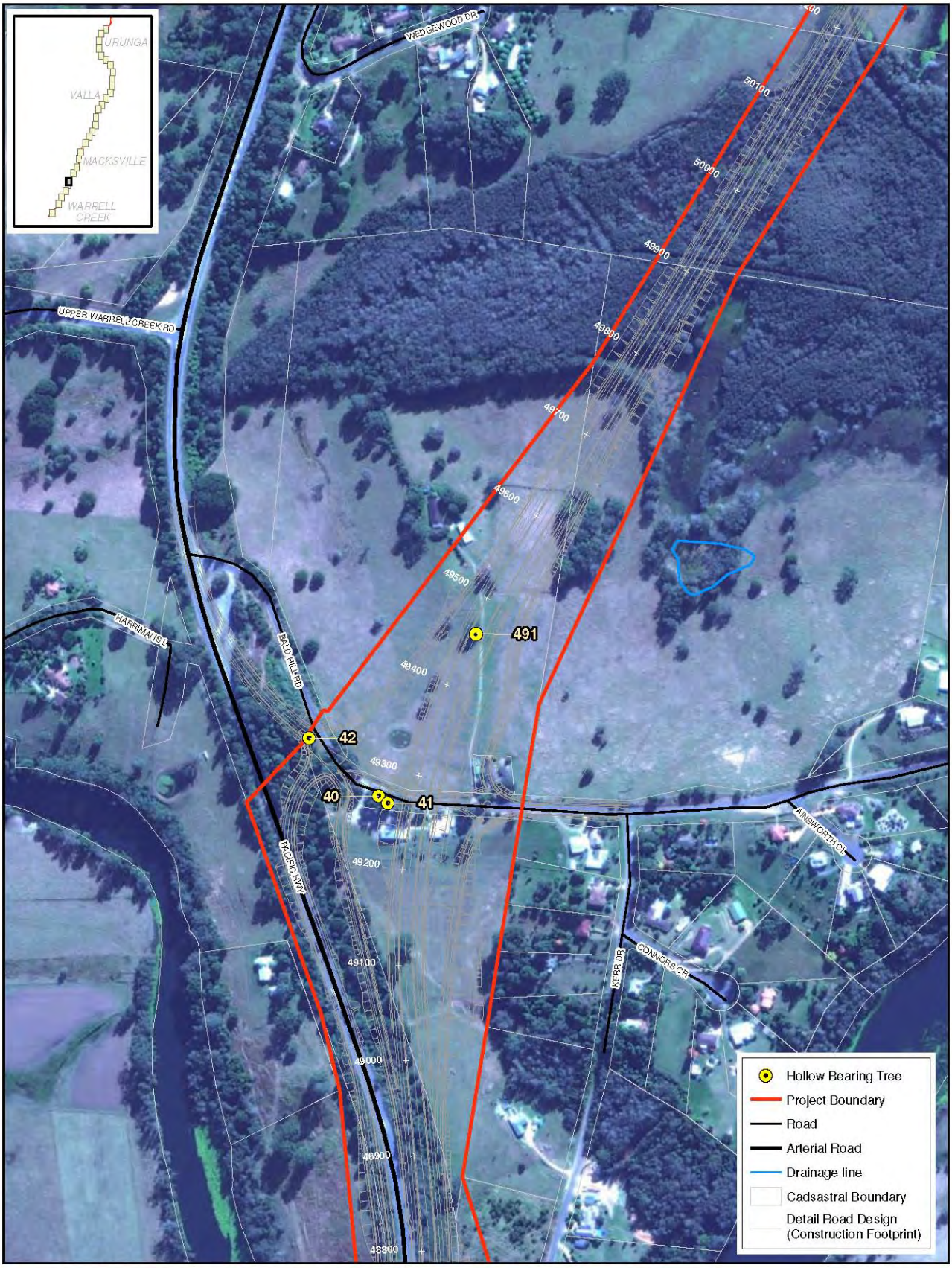


**Figure 7 : HOLLOW BEARING TREES**

Source:
Cadastre: Roads and Traffic Authority 2007
HBT Survey: Lewis Ecological Surveys April 2012
Roads: Geoscience Australia 2009
Highway Design (footprint): RTA 2011
Project Boundary: RTA 2011
Drainage: Geoscience Australia 2009
State Forests: NSW DPI 2008

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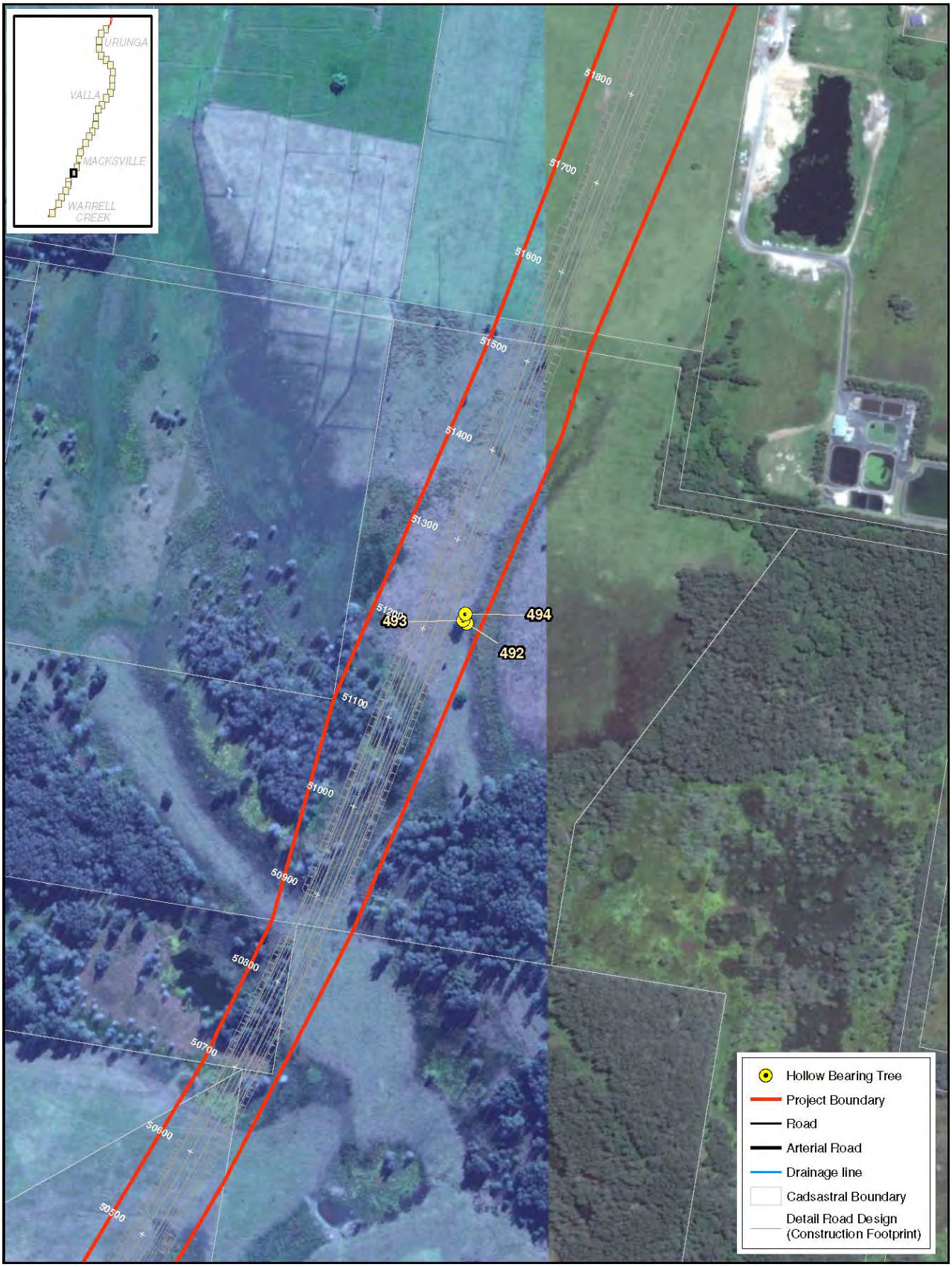


**Figure 8 : HOLLOW BEARING TREES**

Source:
Cadastre: Roads and Traffic Authority 2007
HBT Survey: Lewis Ecological Surveys April 2012
Roads: Geoscience Australia 2009
Highway Design (footprint): RTA 2011
Project Boundary: RTA 2011
Drainage: Geoscience Australia 2009
State Forests: NSW DPI 2008

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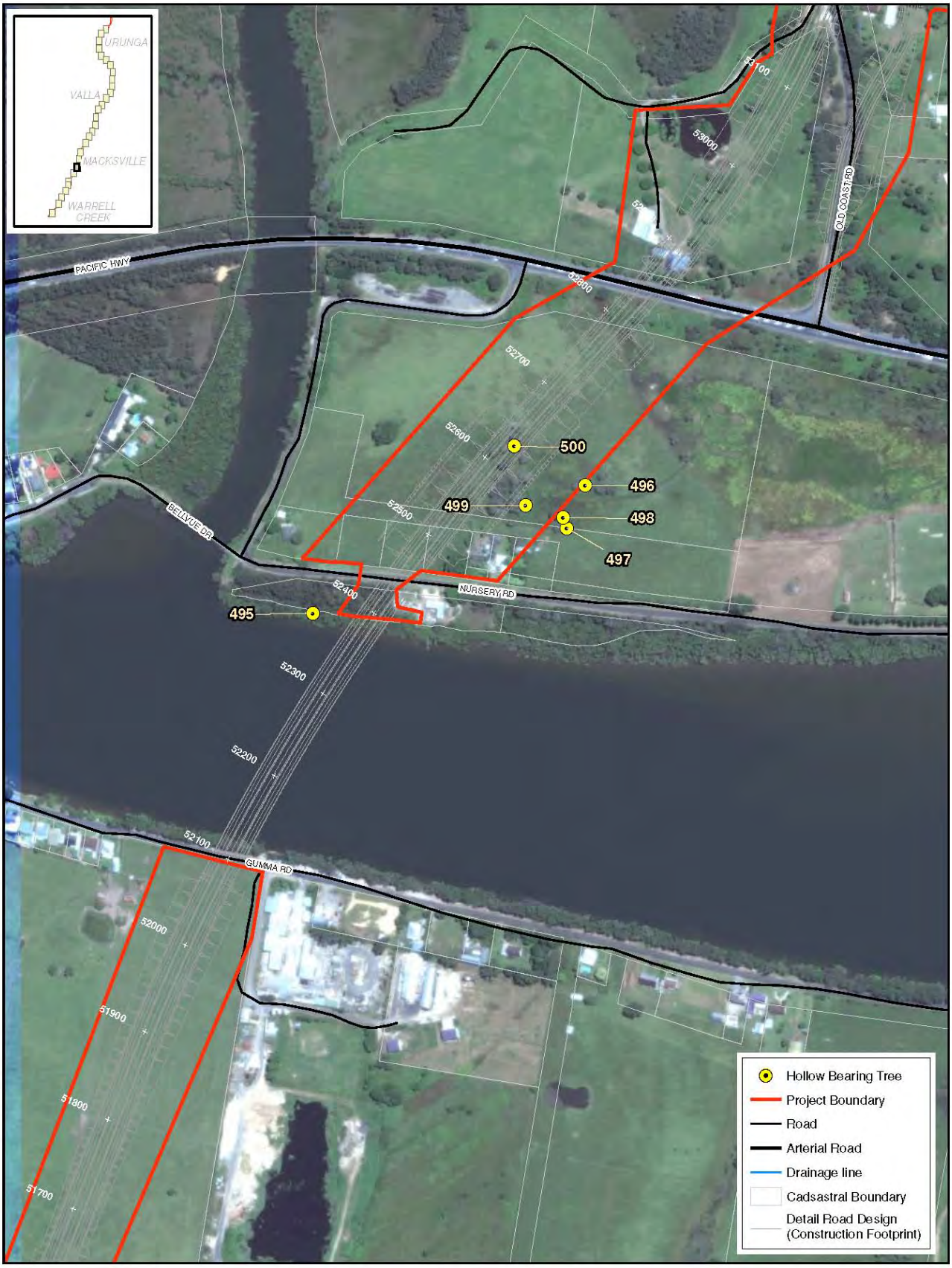


## Figure 9 : HOLLOW BEARING TREES

Source:
Cadastre: Roads and Traffic Authority 2007
HBT Survey: Lewis Ecological Surveys April 2012
Roads: Geoscience Australia 2009
Highway Design (footprint): RTA 2011
Project Boundary: RTA 2011
Drainage: Geoscience Australia 2009
State Forests: NSW DPI 2008

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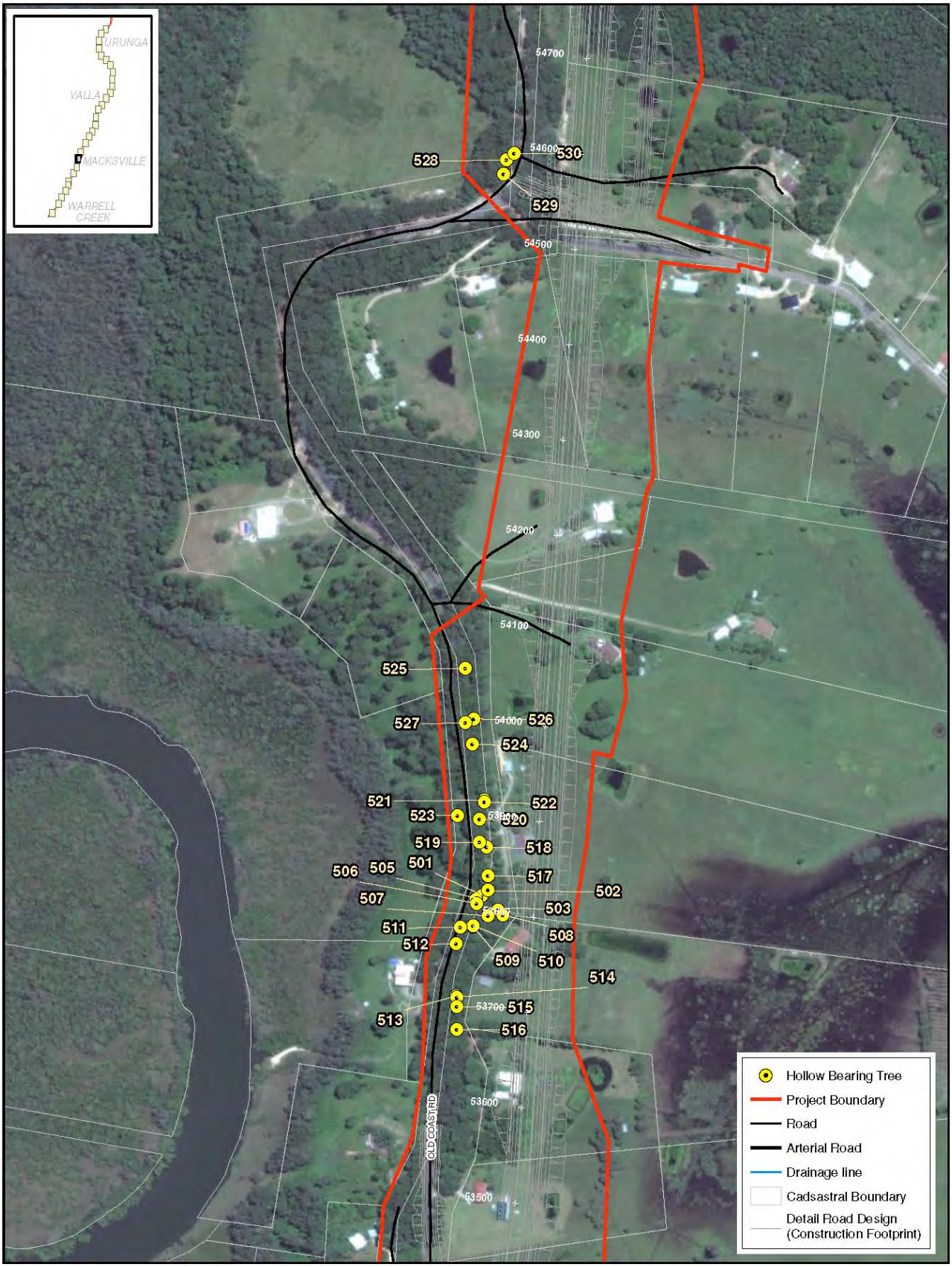


**Figure 10 : HOLLOW BEARING TREES**

Source:
Cadastre: Roads and Traffic Authority 2007
HBT Survey: Lewis Ecological Surveys April 2012
Roads: Geoscience Australia 2009
Highway Design (footprint): RTA 2011
Project Boundary: RTA 2011
Drainage: Geoscience Australia 2009
State Forests: NSW DPI 2008

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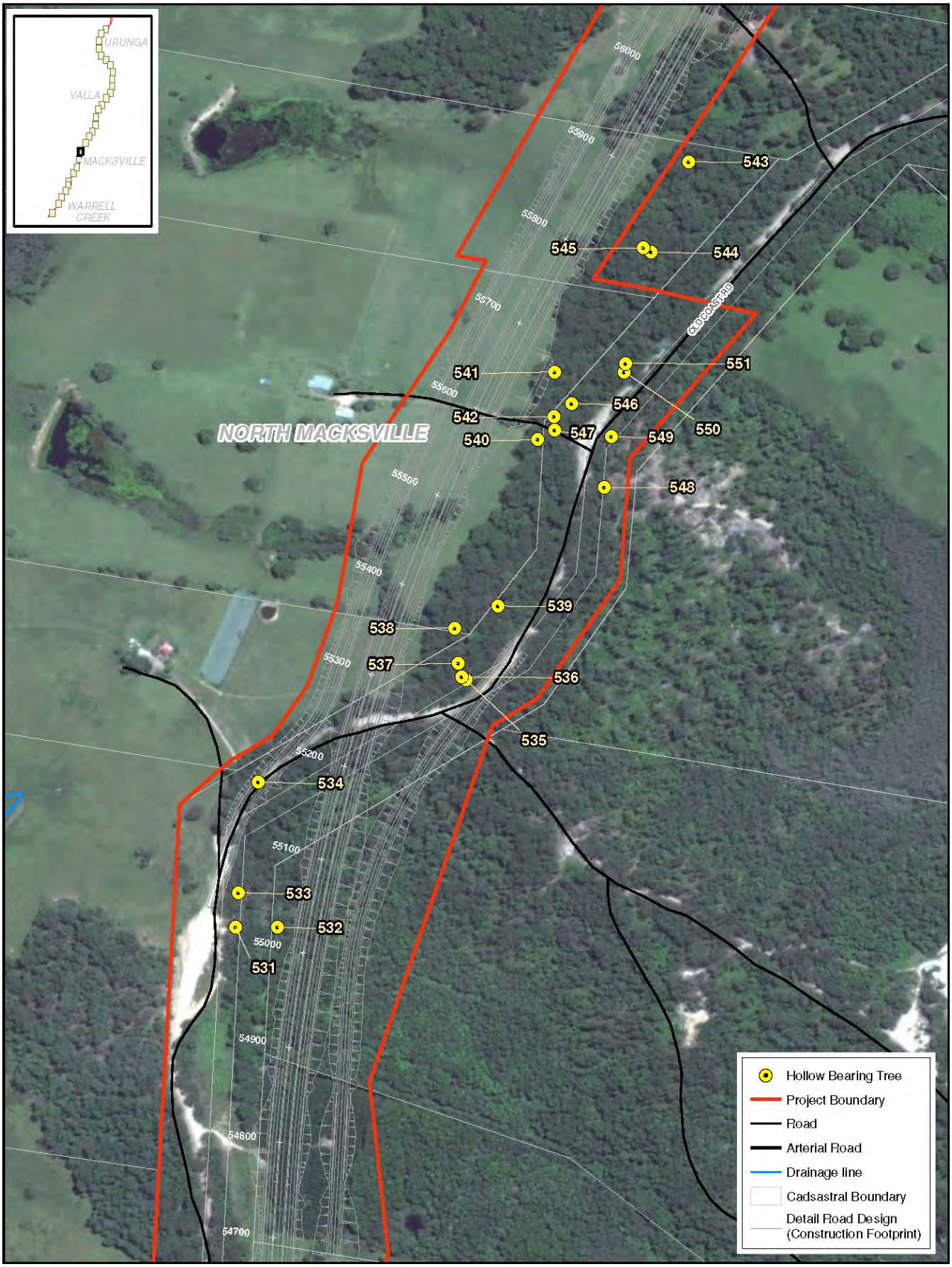


## Figure 11 : HOLLOW BEARING TREES

Source:
Cadastre: Roads and Traffic Authority 2007
HBT Survey: Lewis Ecological Surveys April 2012
Roads: Geoscience Australia 2009
Highway Design (footprint): RTA 2011
Project Boundary: RTA 2011
Drainage: Geoscience Australia 2009
State Forests: NSW DPI 2008

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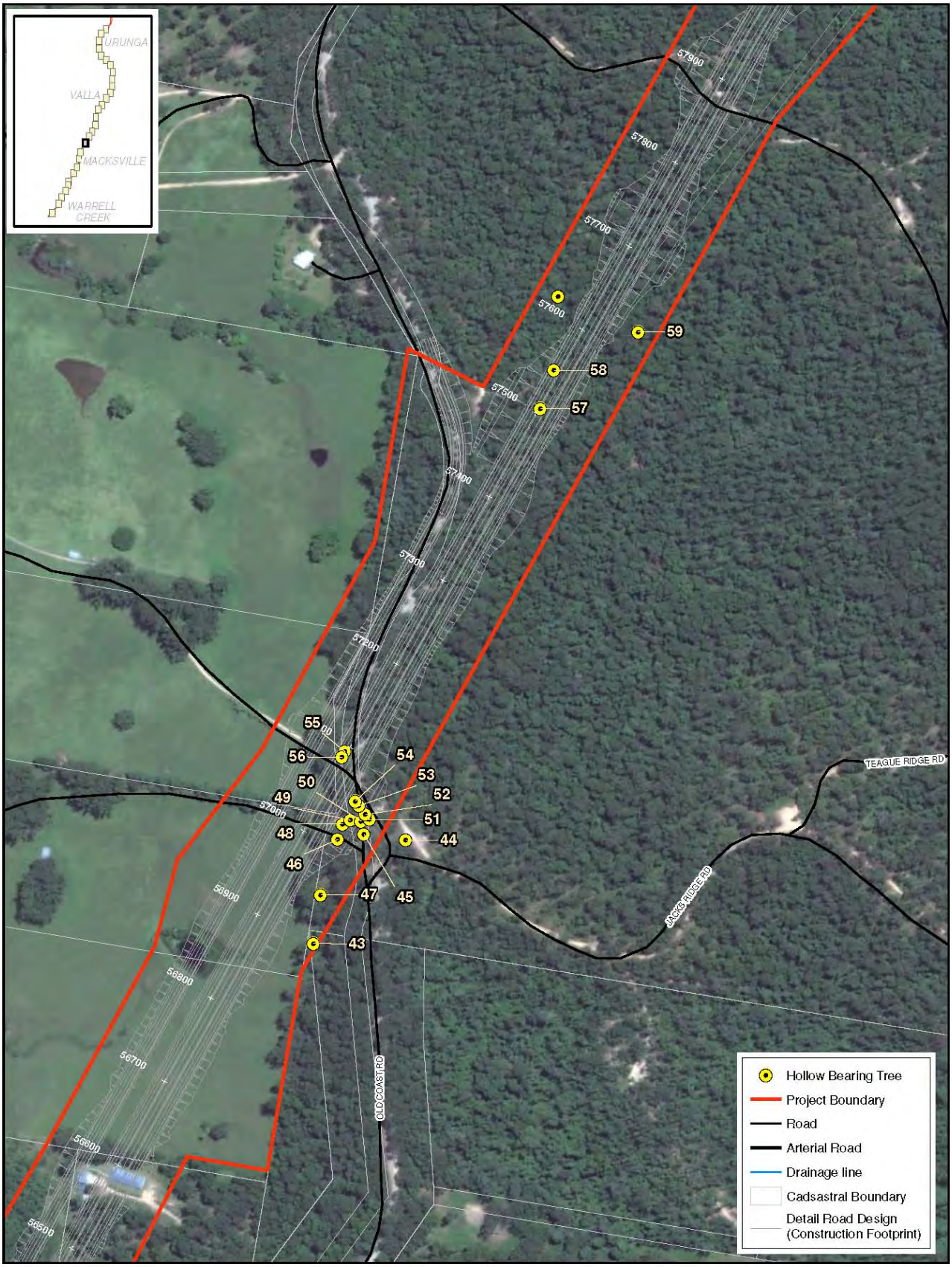


**Figure 12 : HOLLOW BEARING TREES**

Source:
Cadastre: Roads and Traffic Authority 2007
HBT Survey: Lewis Ecological Surveys April 2012
Roads: Geoscience Australia 2009
Highway Design (footprint): RTA 2011
Project Boundary: RTA 2011
Drainage: Geoscience Australia 2009
State Forests: NSW DPI 2008

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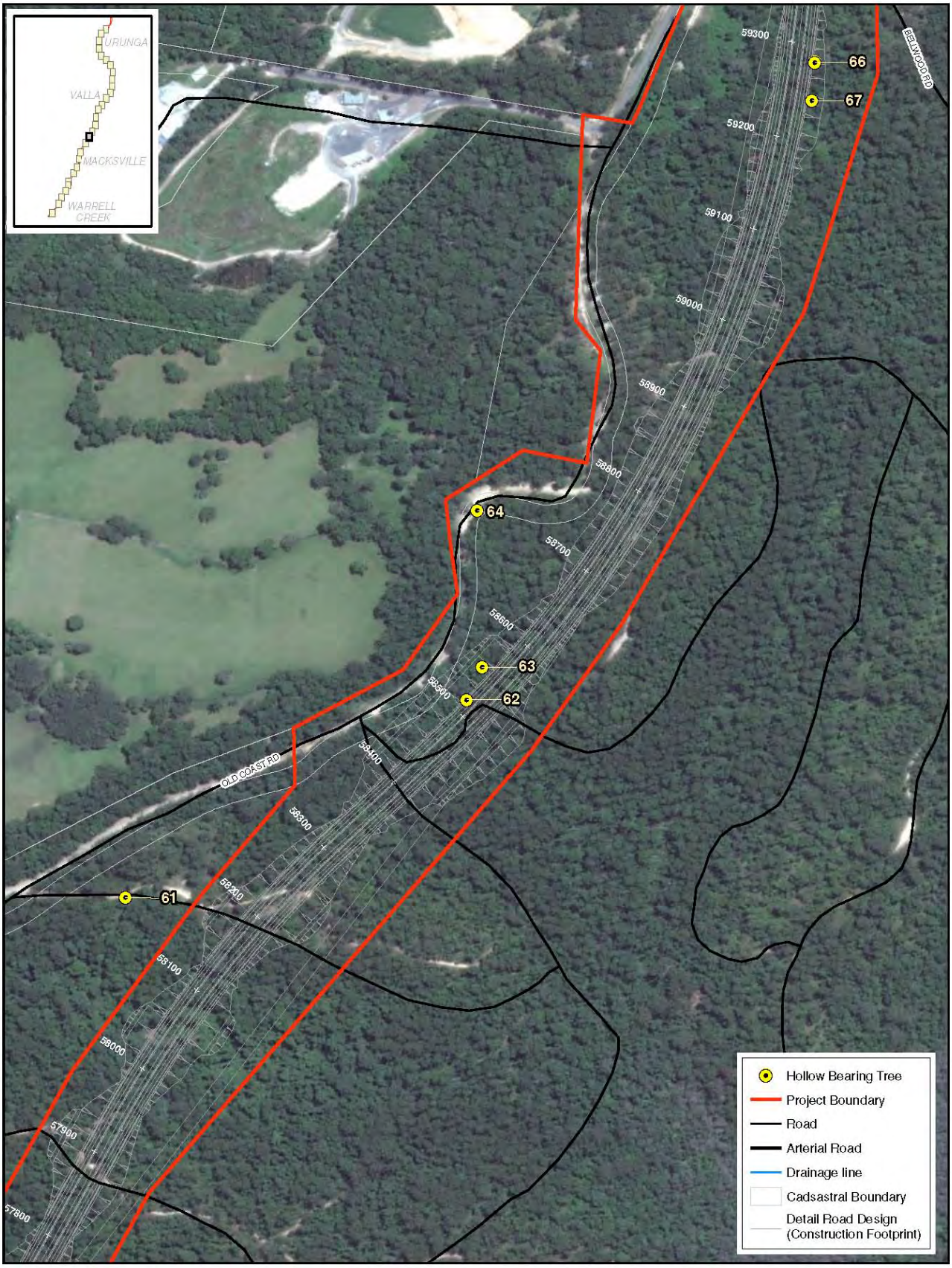


## Figure 13 : HOLLOW BEARING TREES

Source:
Cadastre: Roads and Traffic Authority 2007
HBT Survey: Lewis Ecological Surveys April 2012
Roads: Geoscience Australia 2009
Highway Design (footprint): RTA 2011
Project Boundary: RTA 2011
Drainage: Geoscience Australia 2009
State Forests: NSW DPI 2008

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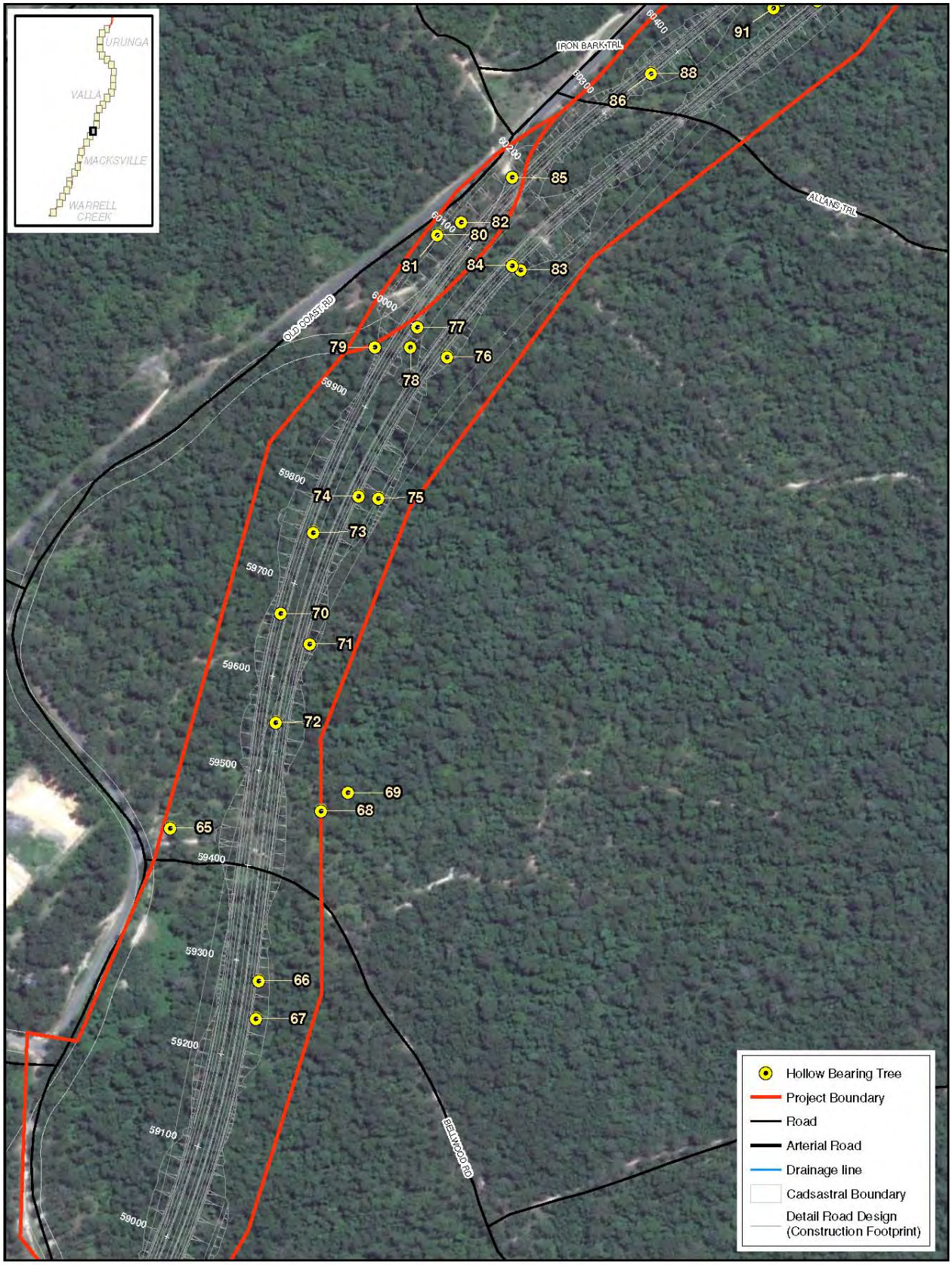


**Figure 14 : HOLLOW BEARING TREES**

Source:
Cadastre: Roads and Traffic Authority 2007
HBT Survey: Lewis Ecological Surveys April 2012
Roads: Geoscience Australia, 2009
Highway Design (footprint): RTA 2011
Project Boundary: RTA 2011
Drainage: Geoscience Australia 2009
State Forests: NSW DPI 2008

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Meters
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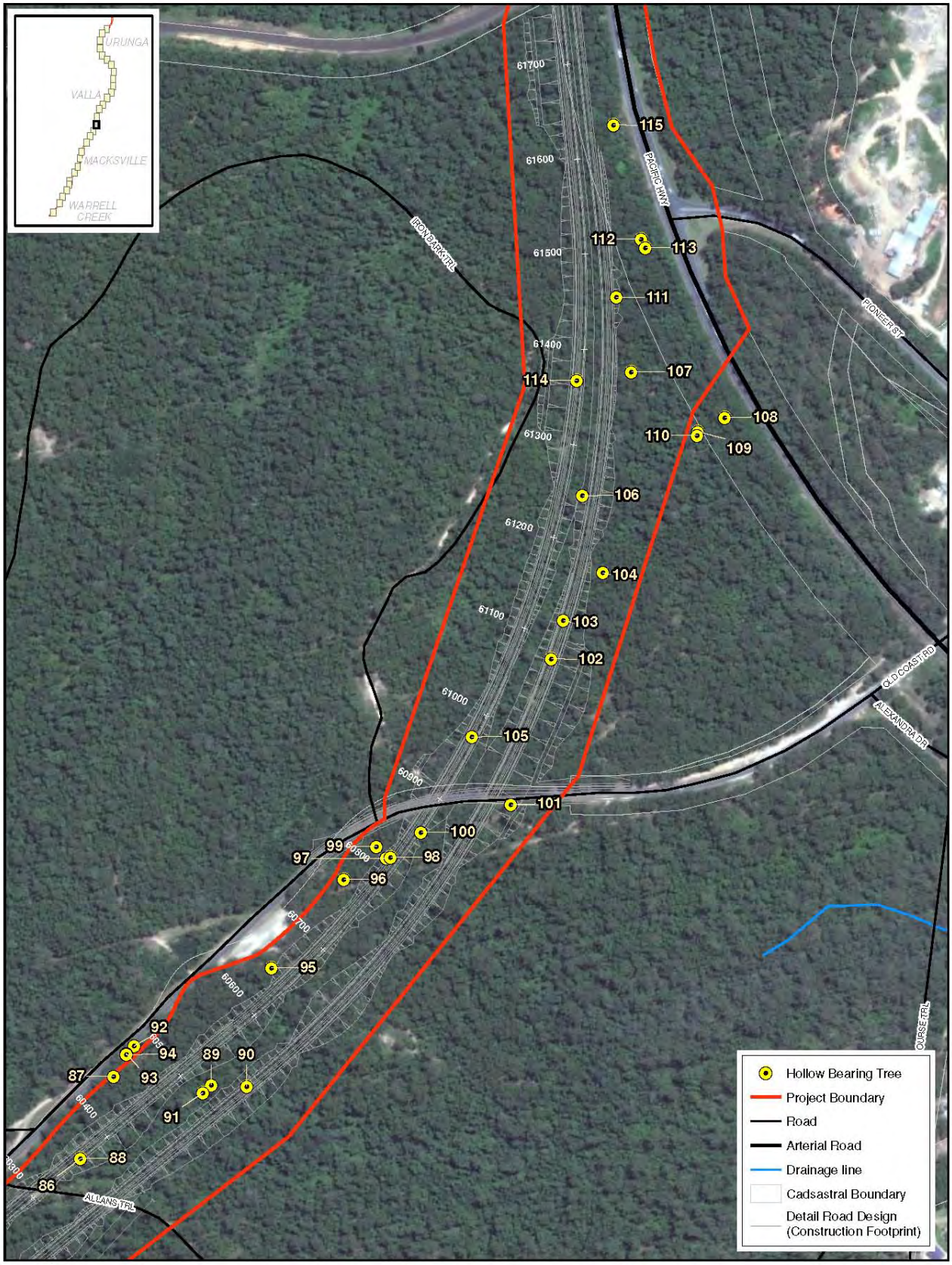


## Figure 15 : HOLLOW BEARING TREES

Source:
Cadastre: Roads and Traffic Authority 2007
HBT Survey: Lewis Ecological Surveys April 2012
Roads: Geoscience Australia, 2009

Highway Design (footprint): RTA 2011
Project Boundary: RTA 2011
Drainage: Geoscience Australia 2009
State Forests: NSW DPI 2008

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0 50 100 150 200 250
Meters

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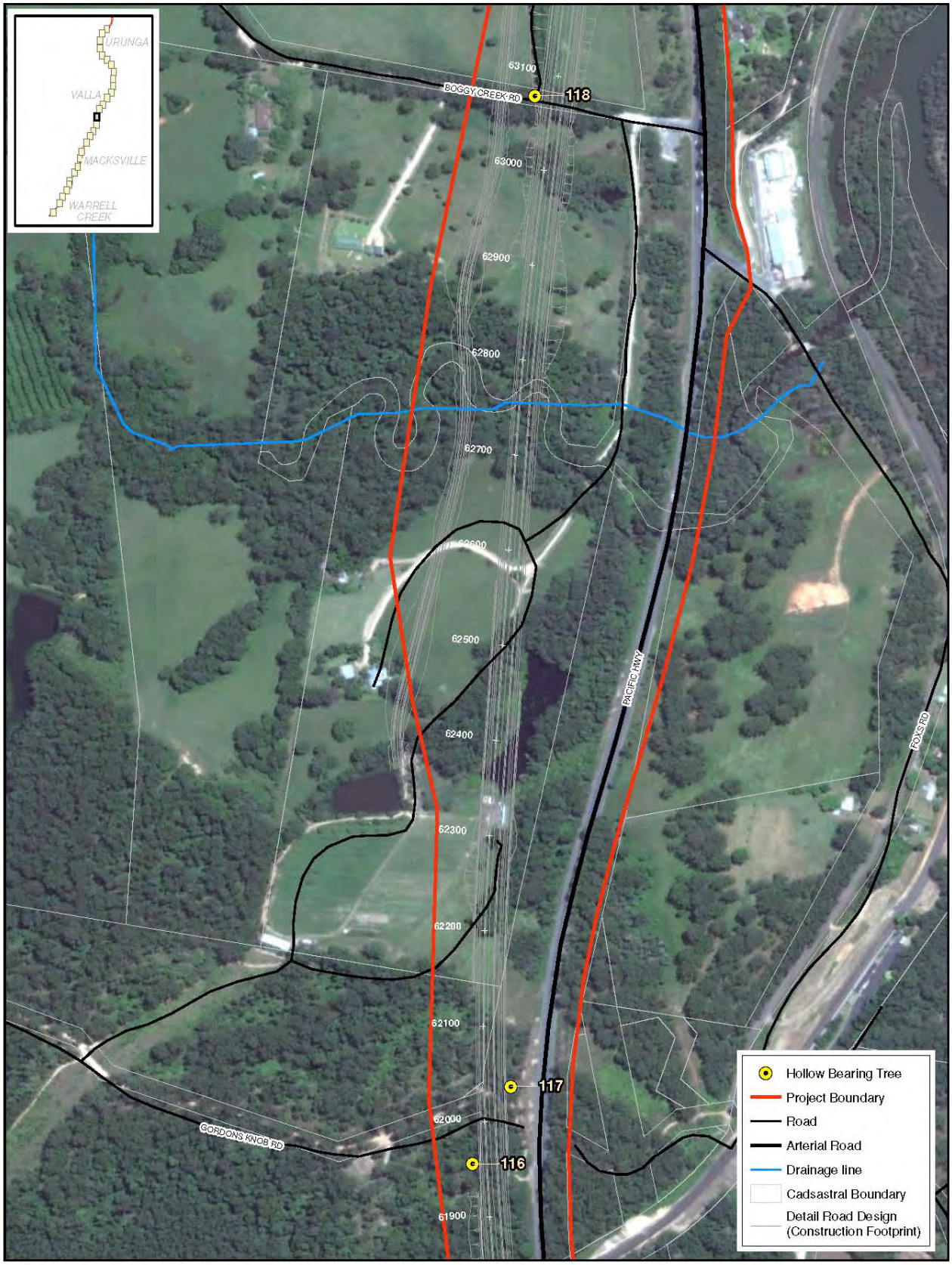


**Figure 16 : HOLLOW BEARING TREES**

Source:
Cadastre: Roads and Traffic Authority 2007
HBT Survey: Lewis Ecological Surveys April 2012
Roads: Geoscience Australia 2009
Highway Design (footprint): RTA 2011
Project Boundary: RTA 2011
Drainage: Geoscience Australia 2009
State Forests: NSW DPI 2008

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0 50 100 150 200 250
Meters

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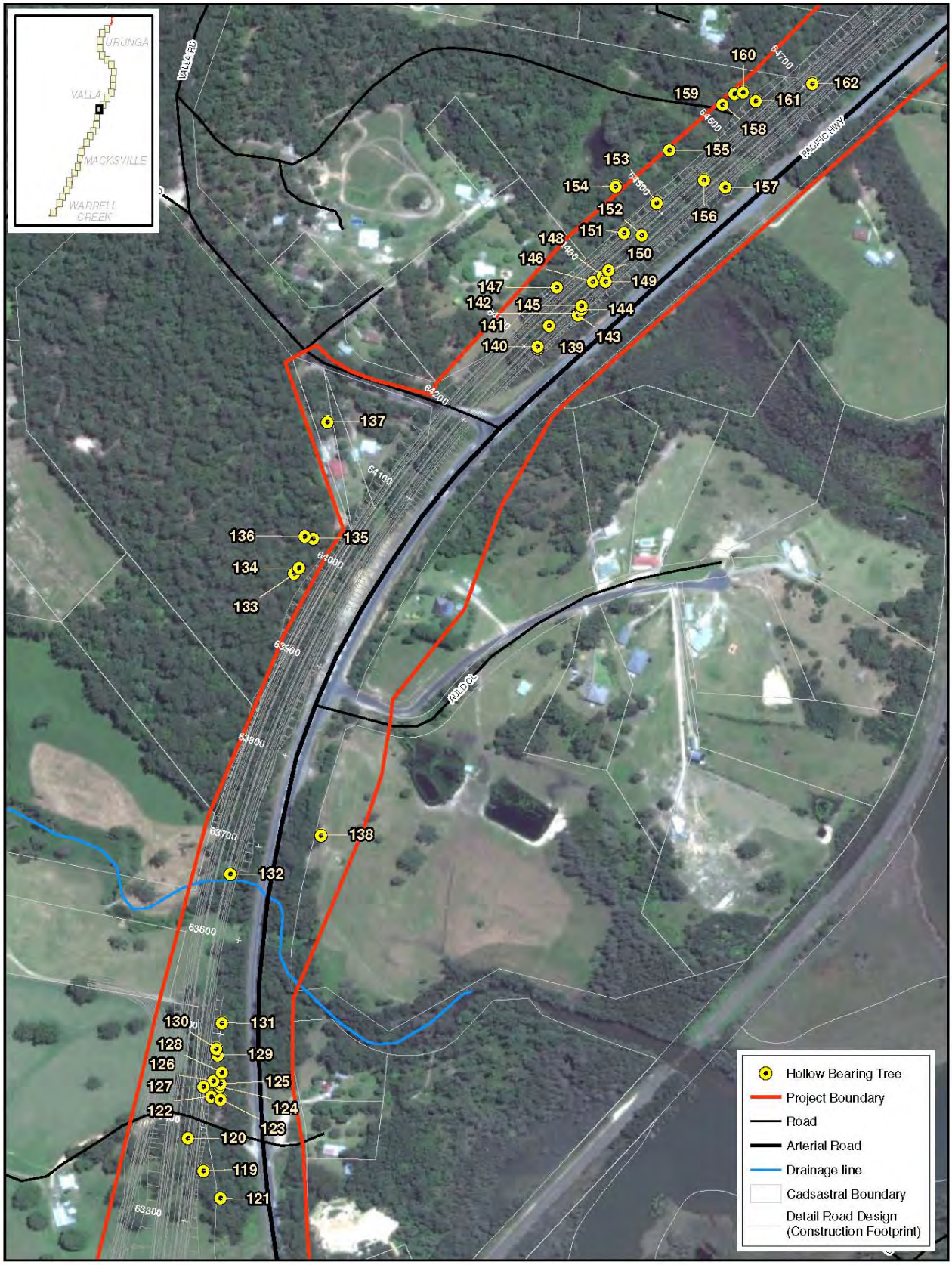


**Figure 17 : HOLLOW BEARING TREES**

Source:
Cadastre: Roads and Traffic Authority 2007
HBT Survey: Lewis Ecological Surveys April 2012
Roads: Geoscience Australia 2009
Highway Design (footprint): RTA 2011
Project Boundary: RTA 2011
Drainage: Geoscience Australia 2009
State Forests: NSW DPI 2008

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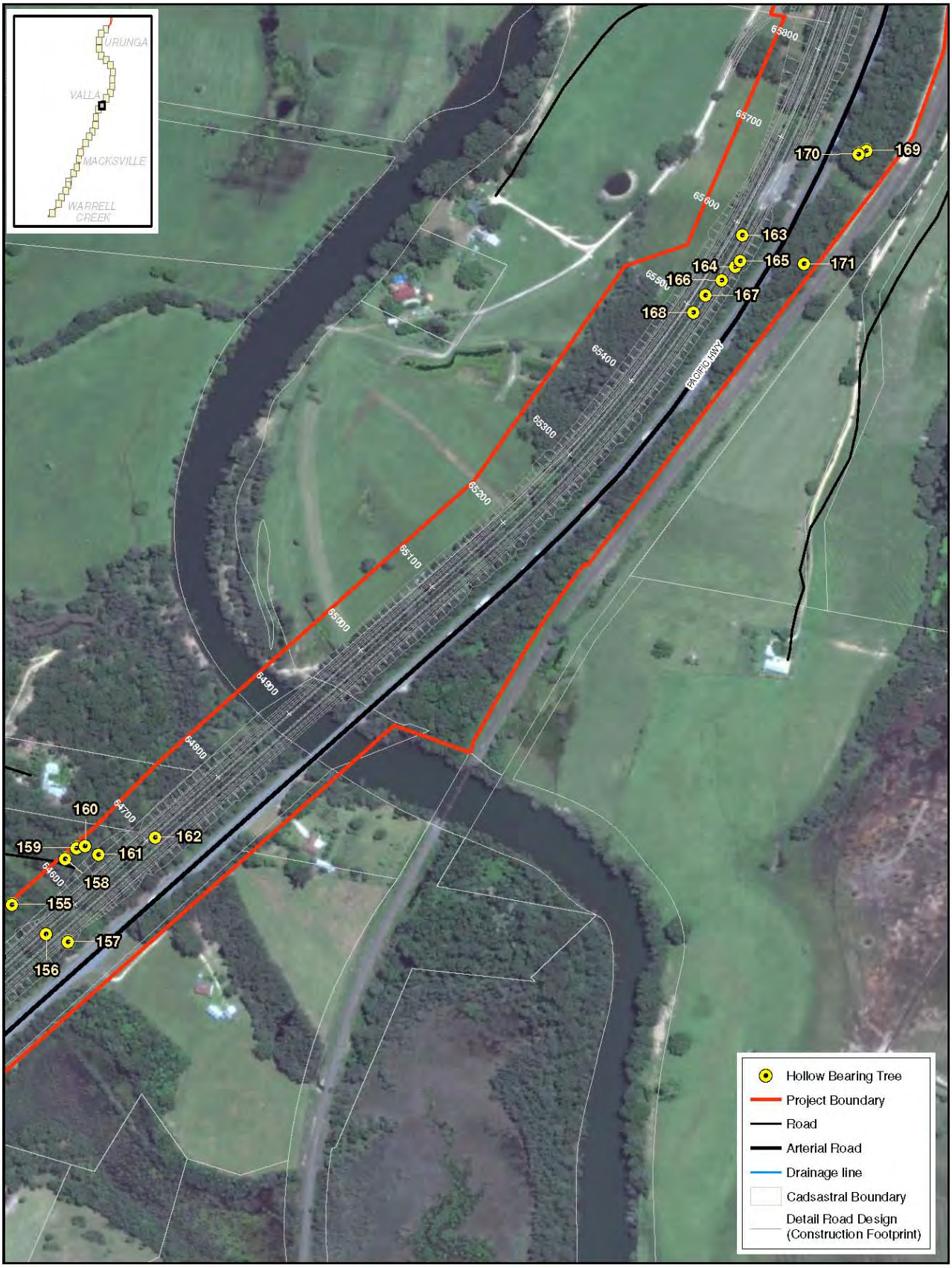


**Figure 18 : HOLLOW BEARING TREES**

Source:
Cadastre: Roads and Traffic Authority 2007
HBT Survey: Lewis Ecological Surveys April 2012
Roads: Geoscience Australia 2009
Highway Design (footprint): RTA 2011
Project Boundary: RTA 2011
Drainage: Geoscience Australia 2009
State Forests: NSW DPI 2008

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0 50 100 150 200 250
Metres
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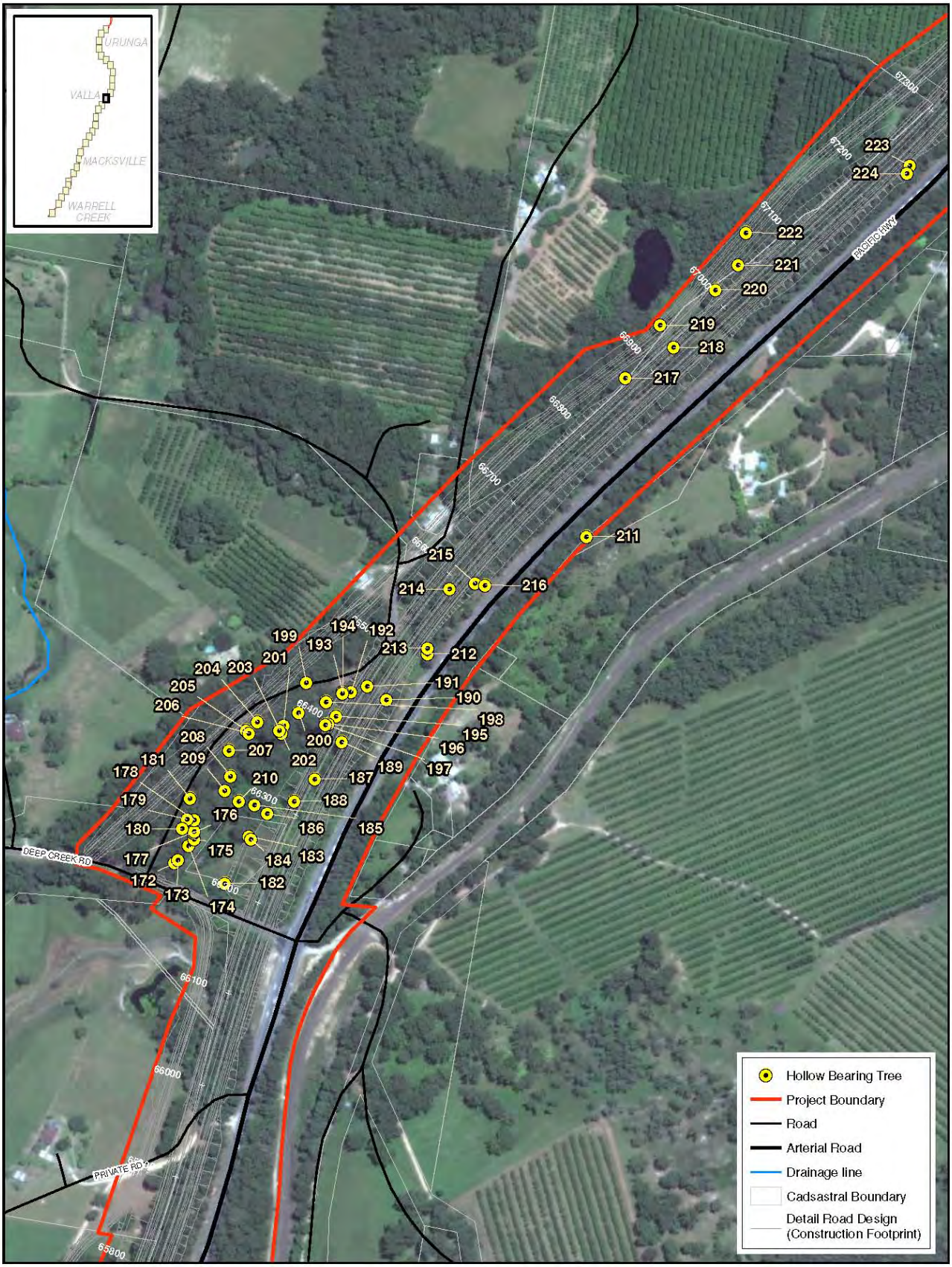


**Figure 19 : HOLLOW BEARING TREES**

Source:
Cadastre: Roads and Traffic Authority 2007
HBT Survey: Lewis Ecological Surveys April 2012
Roads: Geoscience Australia 2009
Highway Design (footprint): RTA 2011
Project Boundary: RTA 2011
Drainage: Geoscience Australia 2009
State Forests: NSW DPI 2008

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0 50 100 150 200 250
Meters
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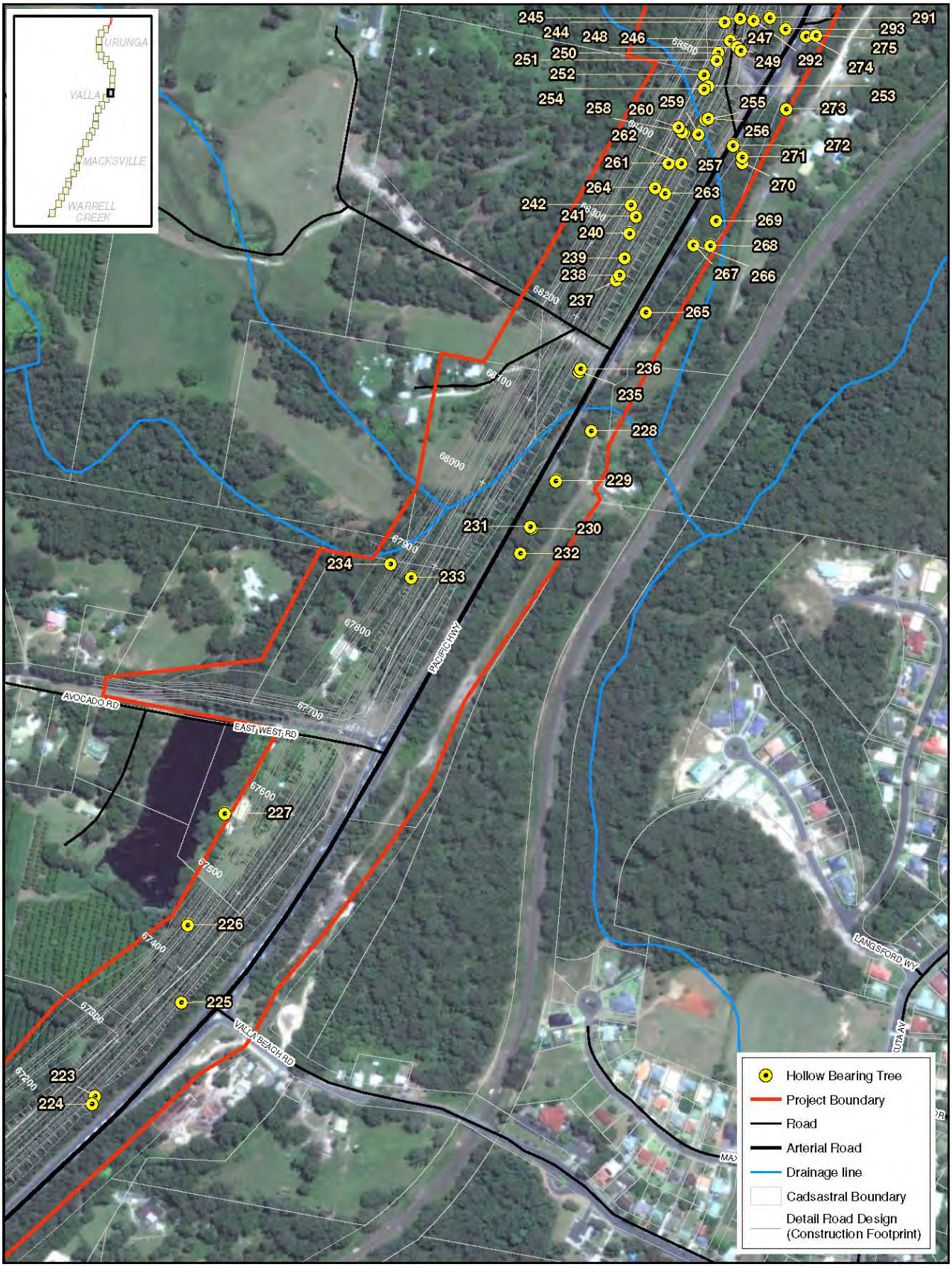


## Figure 20 : HOLLOW BEARING TREES

Source:
Cadastre: Roads and Traffic Authority 2007
HBT Survey: Lewis Ecological Surveys April 2012
Roads: Geoscience Australia 2009
Highway Design (footprint): RTA 2011
Project Boundary: RTA 2011
Drainage: Geoscience Australia 2009
State Forests: NSW DPI 2008

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0 50 100 150 200 250
Metres
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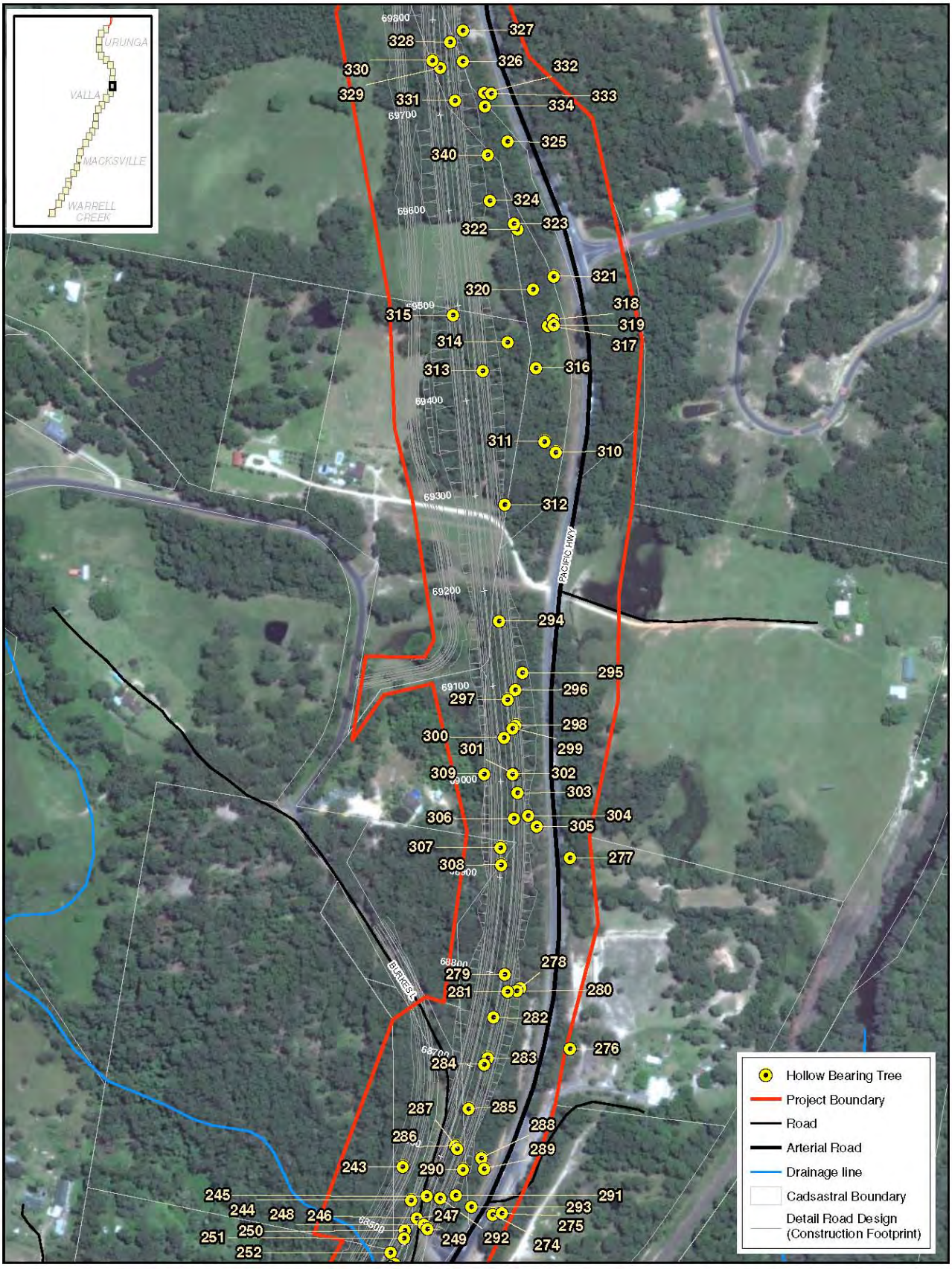


**Figure 21 : HOLLOW BEARING TREES**

Source:
Cadastre: Roads and Traffic Authority 2007
HBT Survey: Lewis Ecological Surveys April 2012
Roads: Geoscience Australia 2009
Highway Design (footprint): RTA 2011
Project Boundary: RTA 2011
Drainage: Geoscience Australia 2009
State Forests: NSW DPI 2008

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0 50 100 150 200 250 Metres

A4 Scale 1:5,000

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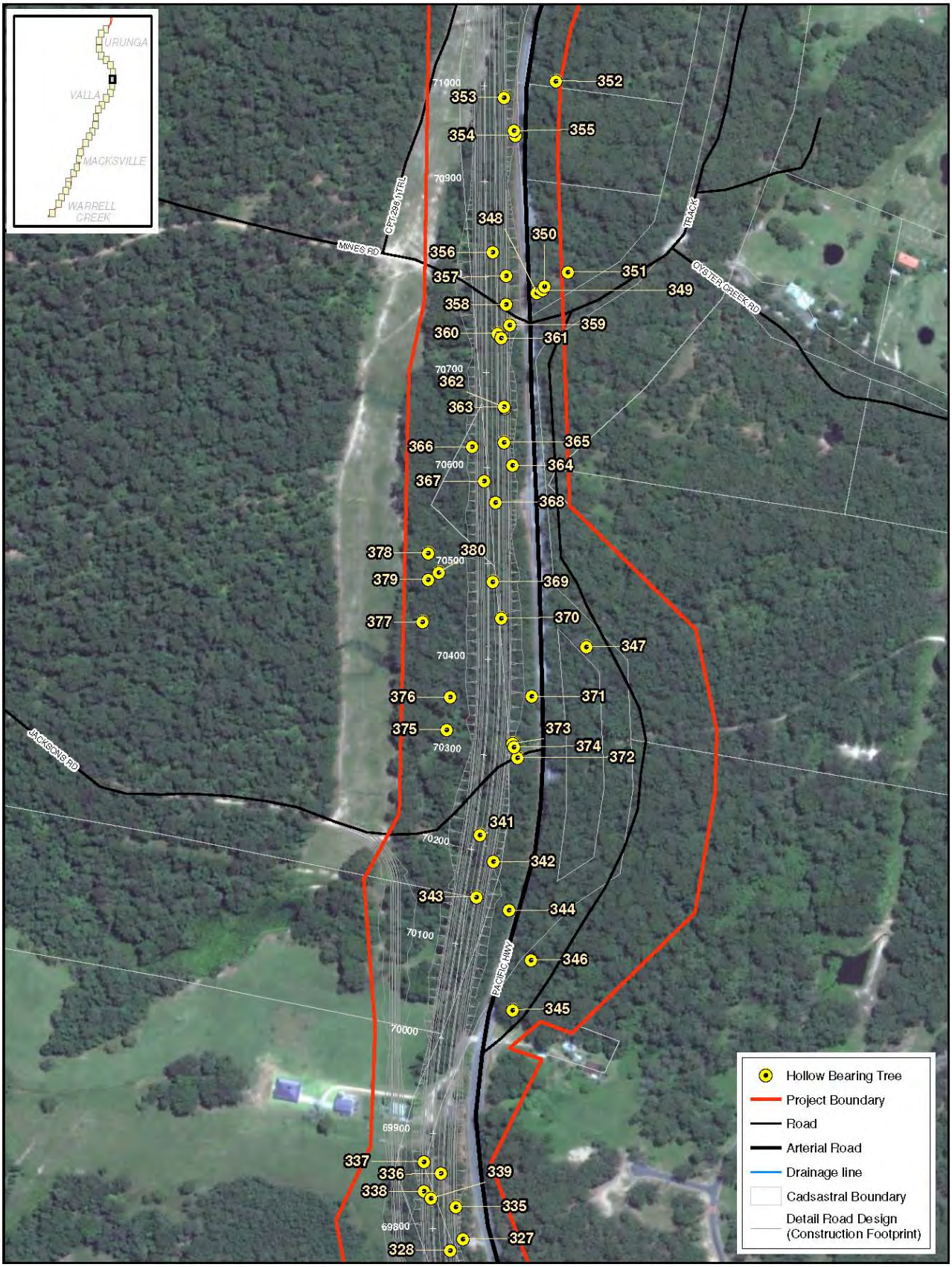


## Figure 22 : HOLLOW BEARING TREES

Source:
Cadastre: Roads and Traffic Authority 2007
HBT Survey: Lewis Ecological Surveys April 2012
Roads: Geoscience Australia 2009
Highway Design (footprint): RTA 2011
Project Boundary: RTA 2011
Drainage: Geoscience Australia 2009
State Forests: NSW DPI 2008

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0 50 100 150 200 250
Metres
A4 Scale 1:5,000

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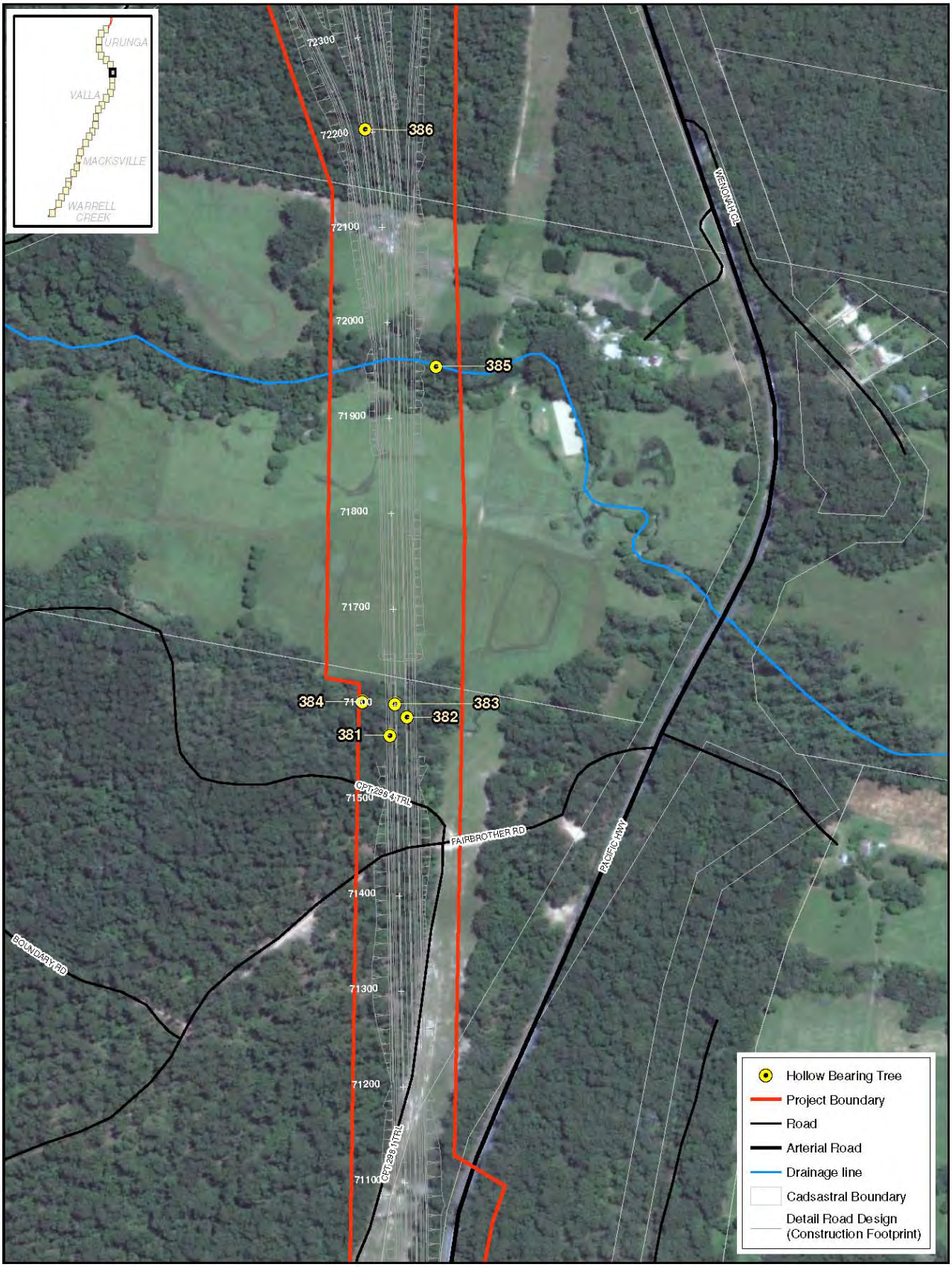


## Figure 23 : HOLLOW BEARING TREES

Source:
Cadastre: Roads and Traffic Authority 2007
HBT Survey: Lewis Ecological Surveys April 2012
Roads: Geoscience Australia 2009
Highway Design (footprint): RTA 2011
Project Boundary: RTA 2011
Drainage: Geoscience Australia 2009
State Forests: NSW DPI 2008

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0 50 100 150 200 250
Metres
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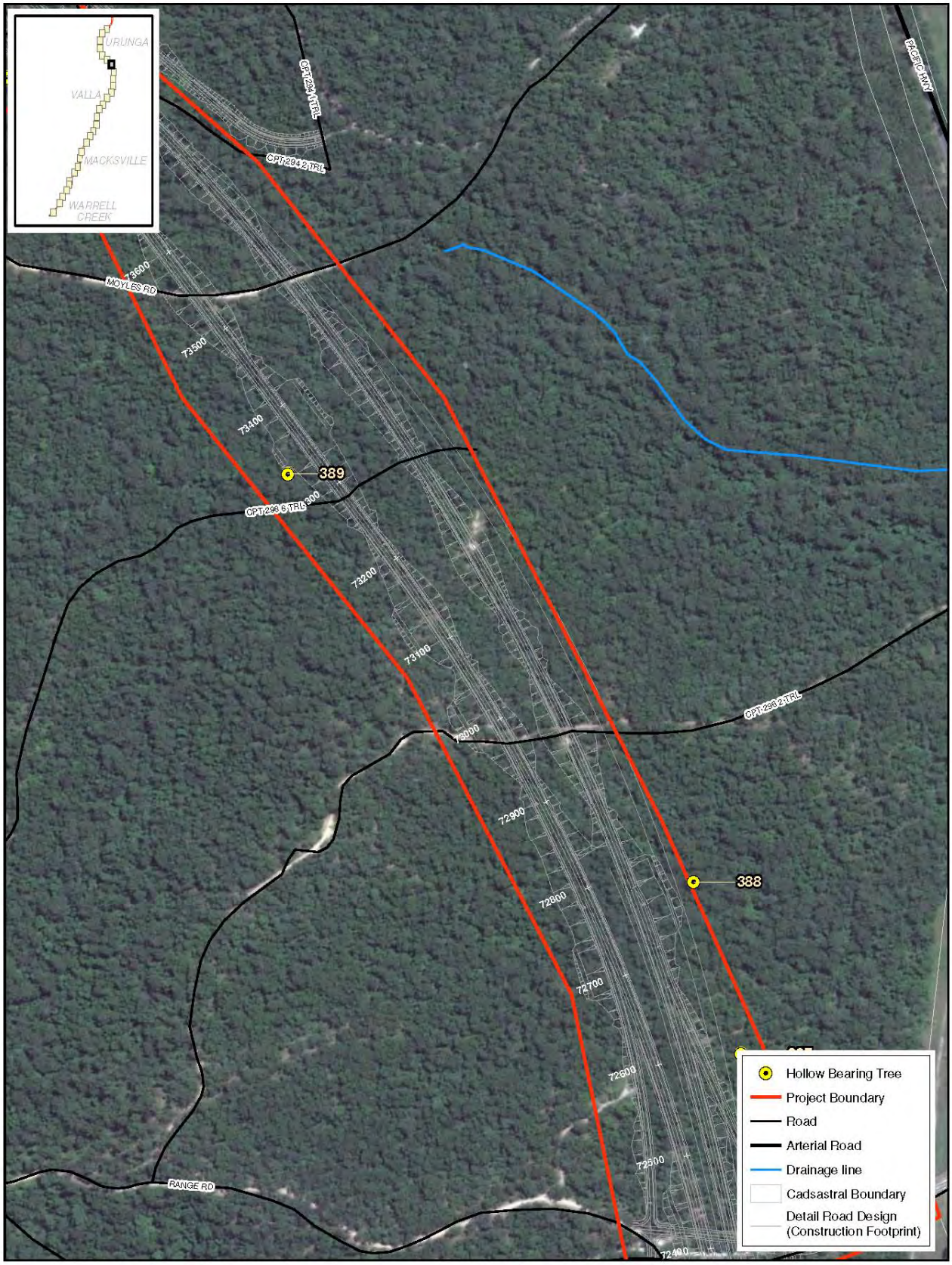


## Figure 24 : HOLLOW BEARING TREES

Source:
Cadastre: Roads and Traffic Authority 2007
HBT Survey: Lewis Ecological Surveys April 2012
Roads: Geoscience Australia 2009
Highway Design (footprint): RTA 2011
Project Boundary: RTA 2011
Drainage: Geoscience Australia 2009
State Forests: NSW DPI 2008

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0 50 100 150 200 250
Meters

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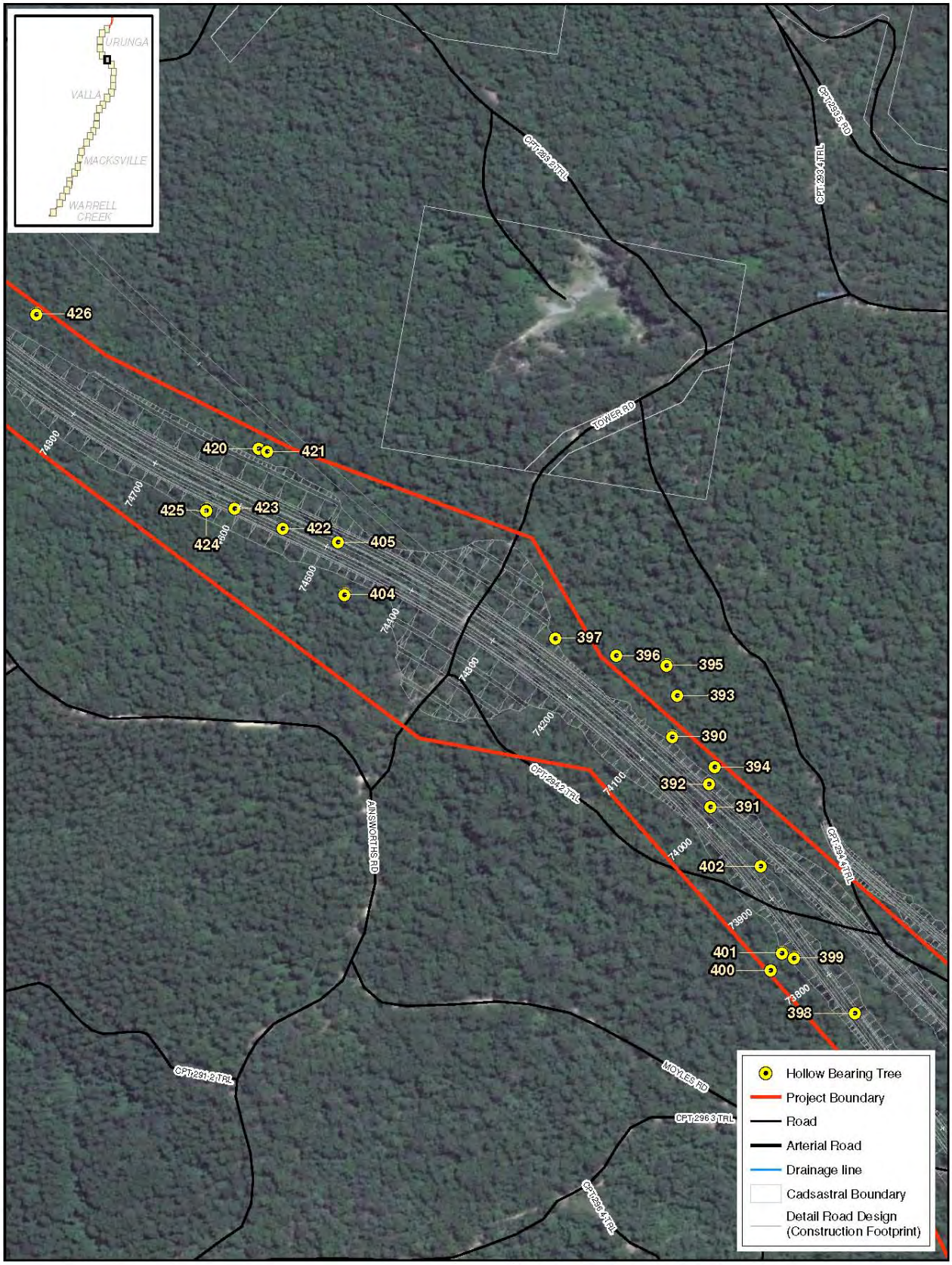


**Figure 25 : HOLLOW BEARING TREES**

Source:
Cadastre: Roads and Traffic Authority 2007
HBT Survey: Lewis Ecological Surveys April 2012
Roads: Geoscience Australia 2009
Highway Design (footprint): RTA 2011
Project Boundary: RTA 2011
Drainage: Geoscience Australia 2009
State Forests: NSW DPI 2008

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0 50 100 150 200 250
Meters
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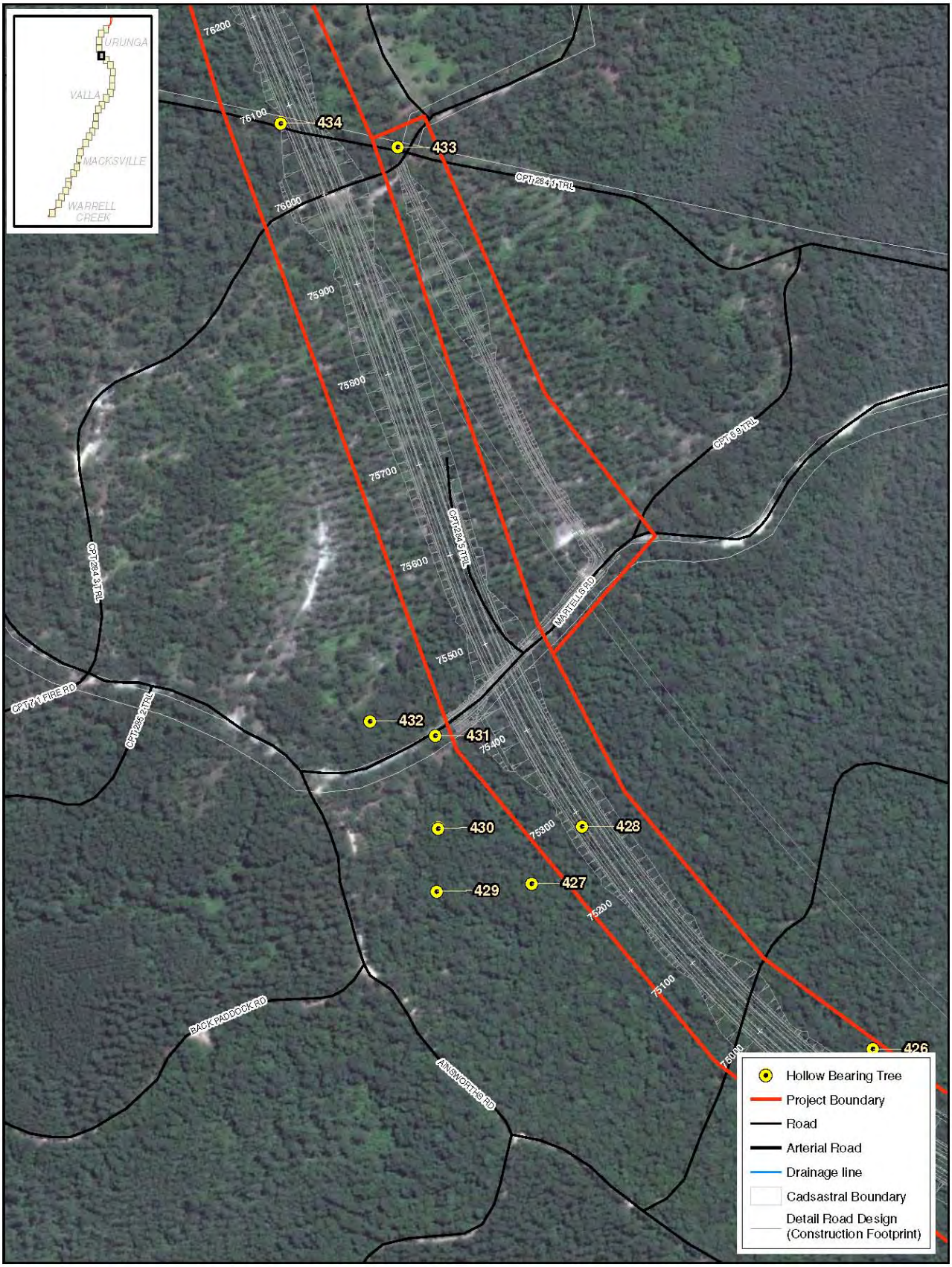


**Figure 26 : HOLLOW BEARING TREES**

Source:
Cadastre: Roads and Traffic Authority 2007
HBT Survey: Lewis Ecological Surveys April 2012
Roads: Geoscience Australia 2009
Highway Design (footprint): RTA 2011
Project Boundary: RTA 2011
Drainage: Geoscience Australia 2009
State Forests: NSW DPI 2008

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0 50 100 150 200 250
Metres
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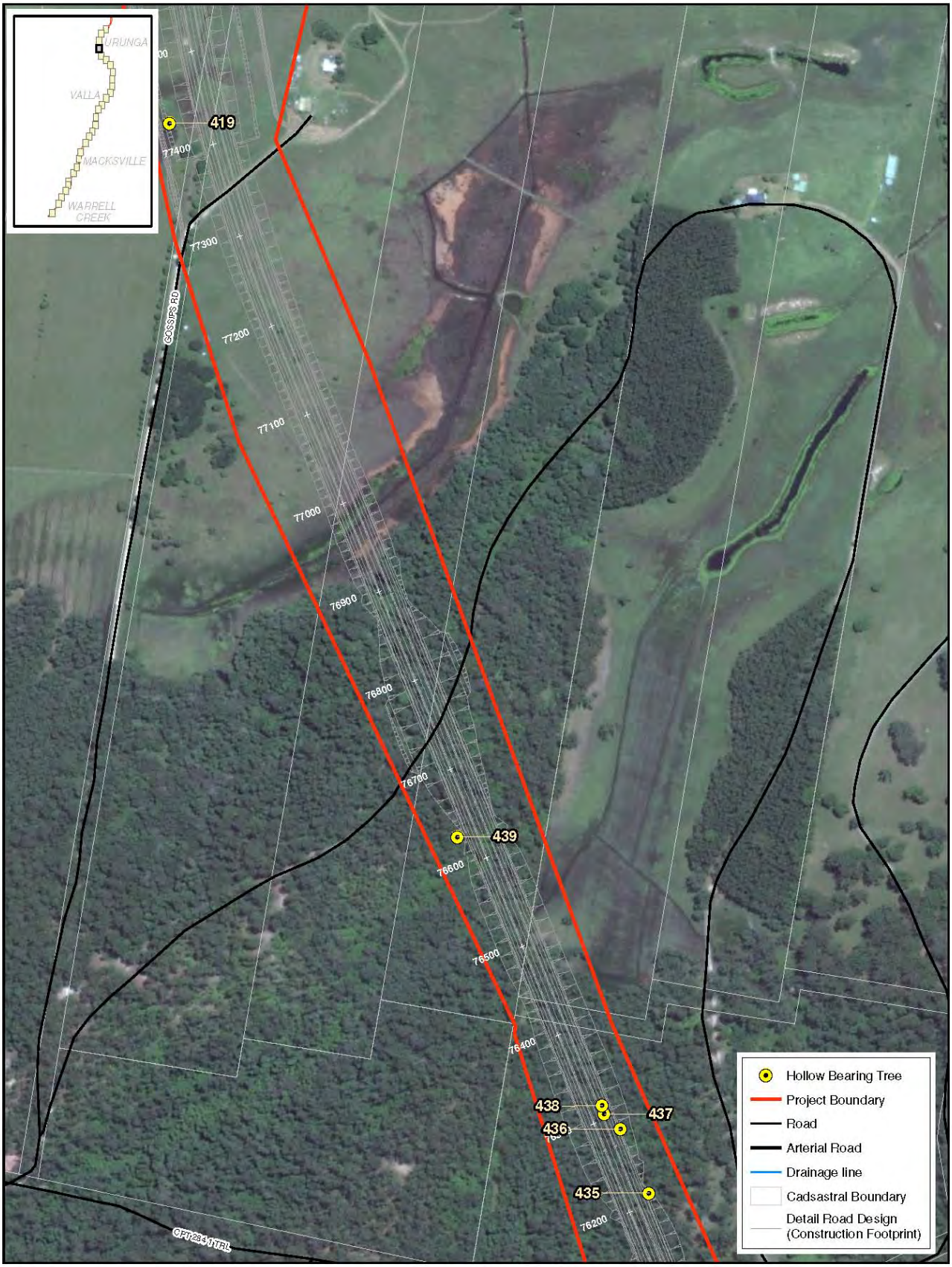


## Figure 27 : HOLLOW BEARING TREES

Source:
Cadastre: Roads and Traffic Authority 2007
HBT Survey: Lewis Ecological Surveys April 2012
Roads: Geoscience Australia 2009
Highway Design (footprint): RTA 2011
Project Boundary: RTA 2011
Drainage: Geoscience Australia 2009
State Forests: NSW DPI 2008

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0 50 100 150 200 250
Metres
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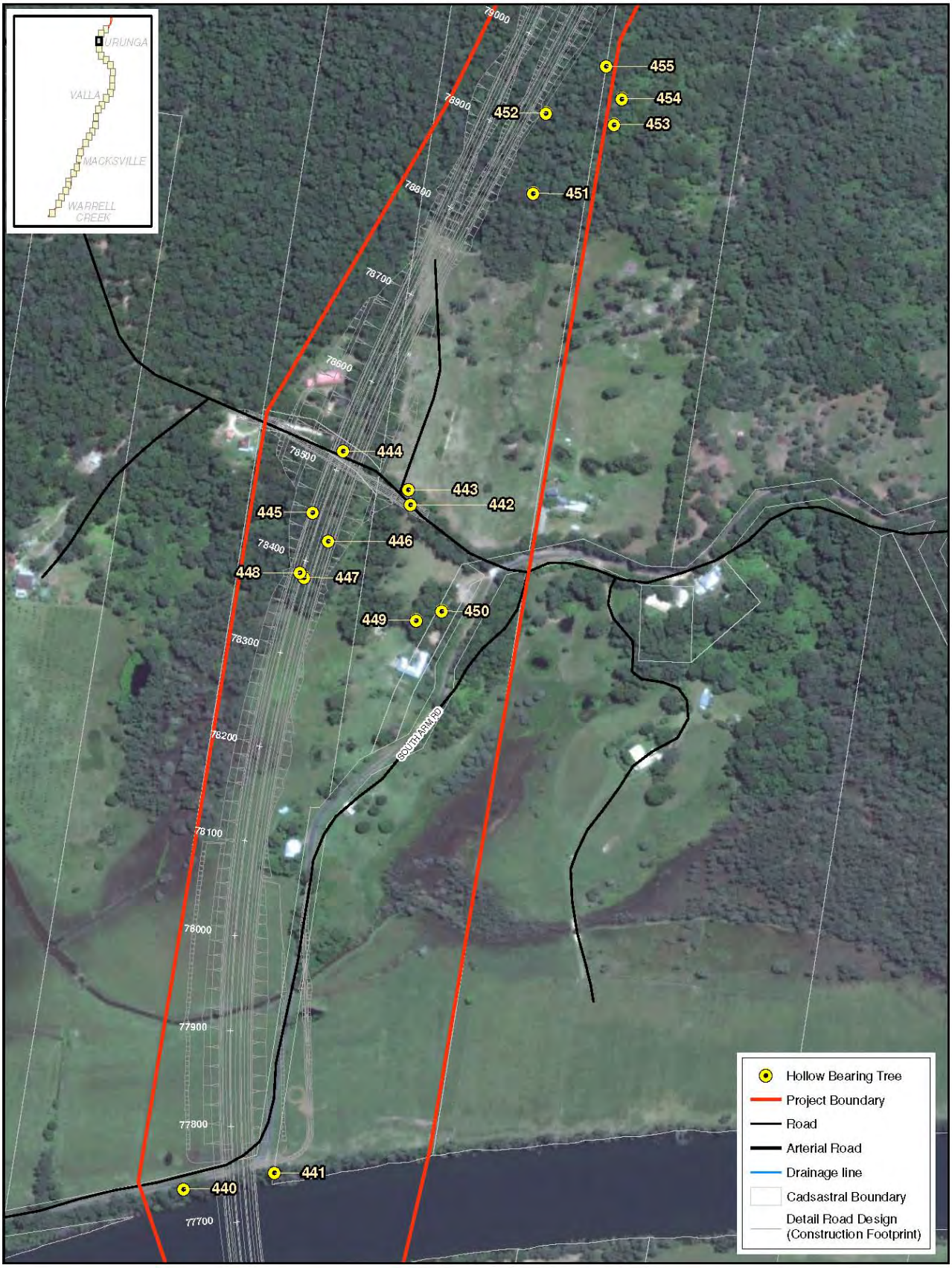


## Figure 28 : HOLLOW BEARING TREES

Source:
Cadastre: Roads and Traffic Authority 2007
HBT Survey: Lewis Ecological Surveys April 2012
Roads: Geoscience Australia 2009
Highway Design (footprint): RTA 2011
Project Boundary: RTA 2011
Drainage: Geoscience Australia 2009
State Forests: NSW DPI 2008

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Metres
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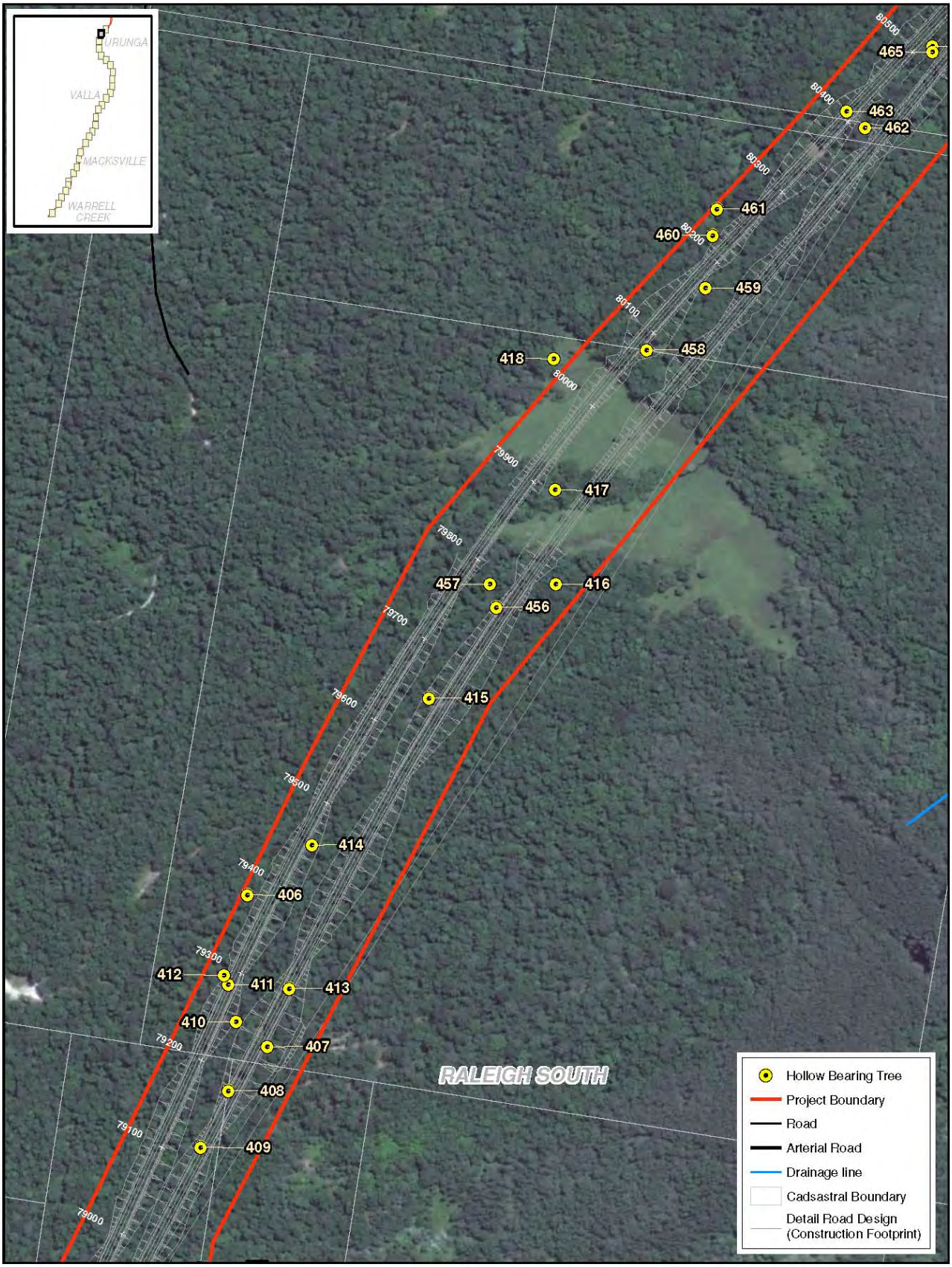


## Figure 29 : HOLLOW BEARING TREES

Source:
Cadastre: Roads and Traffic Authority 2007
HBT Survey: Lewis Ecological Surveys April 2012
Roads: Geoscience Australia 2009
Highway Design (footprint): RTA 2011
Project Boundary: RTA 2011
Drainage: Geoscience Australia 2009
State Forests: NSW DPI 2008

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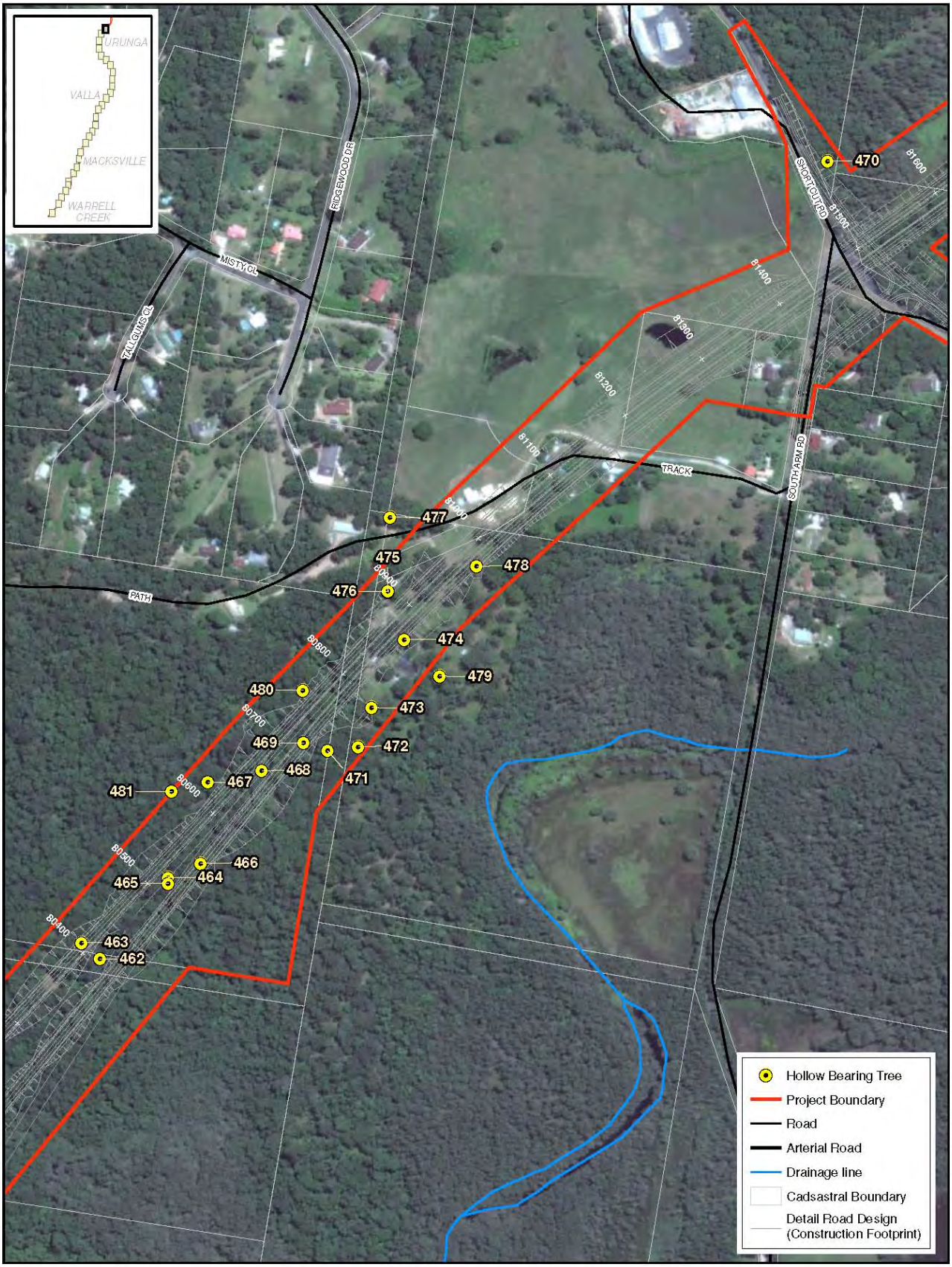


**Figure 30 : HOLLOW BEARING TREES**

Source:
Cadastre: Roads and Traffic Authority 2007
HBT Survey: Lewis Ecological Surveys April 2012
Roads: Geoscience Australia 2009
Highway Design (footprint): RTA 2011
Project Boundary: RTA 2011
Drainage: Geoscience Australia 2009
State Forests: NSW DPI 2008

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**Table C**. Summary data from the hollow bearing tree survey conducted on those accessible properties for the Warrell Creek to Urunga Pacific Highway Upgrade between December-March 2012.

HBT = Hollow bearing tree and reference number, ~ = approximate or estimate, No. Func. Holl. = Number of function hollows SF = Scansorial fauna, MB = Microbats, Small gliders, LG = Larger Gliders, Po = Possums, Pa = Parrots, Lorikeets, Treecreeper, SO = Small owls, LFO = Large forest owls, EB = European Bees, LM = Lace Monitor, AH = Arboreal herpetofauna.

| HBT Ref No. | Species | Easting | Northing | DBH (cm) | ~Tree Height (m) | No. Func. Holl. | Trunk Butt | Trunk Fissures | Trunk Small | Trunk Medium | Trunk Large | Limb Small | Limb Medium | Limb Large | SF | MB | SG | LG | Po | Pa | Co | SO | LFO | EB | LM | AH | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | WGS84 | WGS84 | | | | | | <5cm | 5-15 cm | >15 cm | <5cm | 5-15 cm | >15 cm | | | | | | | | | | | | | |
| 1 | Stag | 489292 | 6594149 | 100 | 21 | 4 | | 1 | | | | 2 | 1 | | 1 | 1 | 1 | | | | | | | | | 1 | Several ringtail possum dreys in the area as associated with upper Warrell Creek |
| 2 | Stag | 489482 | 6594420 | 130 | 9 | 2 | | 1 | | | 1 | | | | 1 | 1 | | | 1 | | | | | | 1 | 1 | |
| 3 | Stag | 489589 | 6594531 | 230 | 30 | 20 | | 1 | 2 | 2 | 4 | 4 | 4 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | 1 | 1 | European bees using small trunk hollow at 11 m |
| 4 | White Mahogany | 489816 | 6594816 | 130 | 21 | 4 | | | | | | 3 | 1 | | 1 | 1 | 1 | | | | | | | | | 1 | |
| 15 | White Mahogany | 490637 | 6596069 | 180 | 22 | 4 | | | | 1 | 1 | 2 | | | | 1 | | | 1 | 1 | | | | | | | Landowner states tree has been aged at 250 years. Brushtail possum probably using the large hollow |
| 16 | Sydney Blue Gum | 490697 | 6596192 | 120 | 23 | 3 | | | | | | 2 | 1 | | 1 | 1 | | | 1 | | | | | | | 1 | |
| 17 | Tallowwood | 490973 | 6597308 | 110 | 22 | 5 | | | 1 | | | 4 | | | | 1 | | | | | | | | | | 1 | Small birds such as Pardolotes probably use this tree. Start of Albert Road trees |
| 18 | Stag | 491110 | 6597352 | 125 | 22 | 9 | | | | | | 6 | 3 | | | 1 | 1 | | | 1 | | | | 1 | | | Scaly-breasted Lorikeets observed using medium hollow. European bees using base of stag to the north |
| 19 | Coastal Blackbutt | 491122 | 6597339 | 120 | 23 | 4 | | | | | | 4 | | | | 1 | 1 | | | | | | | | | 1 | |
| 20 | Coastal Blackbutt | 491126 | 6597338 | 130 | 24 | 3 | | | | | | 3 | | | | 1 | 1 | | | | | | | | | 1 | |
| 21 | Coastal Blackbutt | 491129 | 6597345 | 120 | 17 | 7 | | | | | | 4 | 3 | | | 1 | 1 | | | 1 | | | | | | 1 | Scaly-breasted Lorikeets observed using medium hollow. |
| 22 | Stag | 491142 | 6597345 | 65 | 22 | 6 | | 1 | | | | 4 | 1 | | | 1 | 1 | | | 1 | | | | | | 1 | |
| 23 | Coastal Blackbutt | 491147 | 6597334 | 170 | 24 | 7 | | | | 1 | | 4 | 2 | | | 1 | 1 | | | 1 | | | | | | 1 | twin trunk trees |
| 24 | Coastal Blackbutt | 491150 | 6597335 | 75 | 20 | 2 | | | | | | 2 | | | | 1 | 1 | | | 1 | | | | | | | |
| 25 | Coastal Blackbutt | 491148 | 6597340 | 115 | 22 | 12 | | | | | | 4 | 6 | 2 | | 1 | 1 | | 1 | 1 | | | | | | | Small gliders doubtful in this Albert road area. Scaly-breasted Lorikeets using medium hollow |
| 26 | White Mahogany | 491160 | 6597334 | 70 | 19 | 5 | | | 1 | 1 | | 3 | | | | 1 | | | | 1 | | | | | | 1 | |
| 27 | Tallowwood | 491163 | 6597337 | 90 | 22 | 2 | | | | | | 2 | | | | 1 | | | | | | | | | | 1 | |
| 28 | Coastal Blackbutt | 491173 | 6597334 | 140 | 20 | 3 | | | | | | 3 | | | | 1 | | | | | | | | | | 1 | |
| 29 | Coastal Blackbutt | 491197 | 6597332 | 105 | 18 | 4 | | | | | | 2 | 2 | | | 1 | | | | 1 | | | | | | | |
| 30 | Coastal Blackbutt | 491219 | 6597329 | 120 | 23 | 3 | | | | | | 3 | | | | 1 | | | | | | | | | | | |
| 31 | Coastal Blackbutt | 491263 | 6597336 | 190 | 17 | 5 | | | | | | 5 | | | | 1 | | | | | | | | | | | Finish of trees in Albert Driver area |
| 32 | White Mahogany | 492100 | 6598598 | 130 | 14 | 6 | | 1 | 2 | | | 3 | | | 1 | 1 | 1 | | | | | | | | | 1 | |
| 33 | Flooded Gum | 492176 | 6598949 | 105 | 18 | 5 | | | | | | 5 | | | 1 | 1 | 1 | | | | | | | | | 1 | |
| 34 | Tallowwood | 492320 | 6599039 | 95 | 16 | 5 | | | | | | 3 | 2 | | 1 | 1 | 1 | | | | | | | | | 1 | Bald Hill Road area |
| 35 | Tallowwood | 492302 | 6599044 | 110 | 17 | 5 | | | | | | 3 | 2 | | 1 | 1 | 1 | | | | | | | | | 1 | |
| 36 | White Mahogany | 492309 | 6599063 | 100 | 17 | 3 | | | | | | 3 | | | 1 | 1 | 1 | | | | | | | | | 1 | |
| 37 | Grey Ironbark | 492462 | 6599311 | 75 | 13 | 1 | | | | | | 1 | | | 1 | 1 | | | | | | | | | | | |
| 38 | Coastal Blackbutt | 492470 | 6599294 | 115 | 23 | 5 | | | | | | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | 1 | |
| 39 | Coastal Blackbutt | 492508 | 6599449 | 135 | 20 | 4 | | | | | | 2 | 2 | | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | 1 | |
| 40 | Flooded Gum | 492420 | 6600018 | 55 | 23 | 1 | | | | 1 | | | | | 1 | | 1 | 1 | | 1 | | | | | | 1 | Broken limb and decay |
| 41 | Flooded Gum | 492430 | 6600011 | 80 | 18 | 3 | | | 1 | | | 2 | | | | 1 | 1 | | | | | | | | | 1 | |
| 42 | Coastal Blackbutt | 492348 | 6600079 | 155 | 18 | 2 | | | | | | 2 | | | | 1 | 1 | | | | | | | | | 1 | Nambucca State Forest |
| 43 | Pink Bloodwood | 495362 | 6606905 | 80 | 22 | 6 | | | | | | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | 1 | |
| 45 | Coastal Blackbutt | 495415 | 6607019 | 63 | 17 | 3 | | | | | | 2 | 1 | | | 1 | 1 | | | | | | | | | 1 | Jacks Ridge Road |
| 46 | Coastal Blackbutt | 495388 | 6607014 | 115 | 18 | 3 | | | | | | 3 | | | | 1 | 1 | | | | | | | | | 1 | |
| 47 | Coastal Blackbutt | 495370 | 6606956 | 118 | 26 | 3 | | | | | | 3 | | | | 1 | 1 | | | | | | | | | 1 | |
| 48 | Coastal Blackbutt | 495393 | 6607030 | 60 | 18 | 2 | | | | | | 2 | | | | 1 | 1 | | | | | | | | | 1 | |
| 49 | Coastal Blackbutt | 495401 | 6607034 | 50 | 19 | 4 | | | 2 | | | 2 | | | | 1 | 1 | | | | | | | | | 1 | |

| HBT Ref No. | Species | Easting | Northing | DBH (cm) | ~Tree Height (m) | No. Func. Holl. | Trunk Butt | Trunk Fissures | Trunk Small | Trunk Medium | Trunk Large | Limb Small | Limb Medium | Limb Large | SF | MB | SG | LG | Po | Pa | Co | SO | LFO | EB | LM | AH | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | WGS84 | WGS84 | | | | | | <5cm | 5-15 cm | >15 cm | <5cm | 5-15 cm | >15 cm | | | | | | | | | | | | | |
| 50 | Coastal Blackbutt | 495412 | 6607033 | 75 | 17 | 4 | | | | | | 2 | 2 | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 51 | Coastal Blackbutt | 495421 | 6607035 | 90 | 19 | 7 | | | | | | 4 | 3 | | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | 1 | |
| 52 | Coastal Blackbutt | 495417 | 6607040 | 80 | 19 | 10 | | | 1 | | | 5 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | 1 | |
| 53 | Coastal Blackbutt | 495410 | 6607049 | 40 | 14 | 4 | | | 1 | | | 2 | 1 | | | 1 | 1 | | | | | | | | | 1 | |
| 54 | Coastal Blackbutt | 495406 | 6607054 | 85 | 20 | 6 | | | 1 | | | 3 | 2 | | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | 1 | |
| 55 | Coastal Blackbutt | 495395 | 6607106 | 85 | 23 | 4 | | | | 2 | | 2 | | | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | 1 | |
| 56 | Coastal Blackbutt | 495392 | 6607100 | 115 | 23 | 6 | | | | | | 3 | 3 | | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | 1 | |
| 57 | Stag | 495600 | 6607465 | 115 | 20 | 3 | | | | | | 3 | | | | 1 | 1 | | | | | | | | | 1 | |
| 58 | Stag | 495614 | 6607505 | 80 | 15 | 20 | | 1 | | | | 5 | 8 | 6 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | 1 | 1 | |
| 59 | Coastal Blackbutt | 495702 | 6607545 | 95 | 24 | 4 | | | | | | 2 | 2 | | | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 60 | Pink Bloodwood | 495618 | 6607582 | 70 | 21 | 2 | | | | | | 2 | | | | 1 | 1 | | | | | | | | | 1 | |
| 62 | Brushbox | 496179 | 6608282 | 40 | 16 | 1 | | | | | 1 | | | | 1 | | | | 1 | | | | | | 1 | 1 | |
| 63 | Stag | 496195 | 6608316 | 100 | 17 | 2 | | | | | 2 | | | | | 1 | | | 1 | | | | | | 1 | 1 | |
| 64 | Coastal Blackbutt | 496190 | 6608480 | 220 | 27 | 8 | | | | | 1 | 4 | 3 | | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | 1 | |
| 65 | Coastal Blackbutt | 496450 | 6609109 | 105 | 22 | 3 | | | | | | 3 | | | 1 | 1 | 1 | | | | | | | | | | |
| 66 | Coastal Blackbutt | 496543 | 6608949 | 120 | 27 | 2 | | | | | | 1 | 1 | | 1 | 1 | 1 | | | | | | | | | 1 | **Potential Square-tailed Kite nest in this tree** |
| 67 | Coastal Blackbutt | 496540 | 6608909 | 125 | 28 | 4 | | | | | | 2 | 2 | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 68 | Coastal Blackbutt | 496608 | 6609127 | 125 | 26 | 8 | | | | | | 5 | 3 | | 1 | 1 | 1 | 1 | 1 | | | | | | | 1 | |
| 70 | Stag | 496566 | 6609334 | 80 | 21 | 5 | | | | | | 3 | 2 | | 1 | 1 | 1 | 1 | 1 | | | | | | 1 | 1 | |
| 71 | Coastal Blackbutt | 496596 | 6609302 | 95 | 24 | 2 | | | | | | 2 | | | | 1 | 1 | | | | | | | | | | |
| 72 | Flooded Gum | 496561 | 6609220 | 90 | 22 | 4 | | | | | | 2 | 2 | | 1 | 1 | 1 | 1 | | | | | | | | 1 | |
| 73 | Red Mahogany | 496600 | 6609419 | 125 | 23 | 5 | | | | | | 2 | 3 | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 74 | Flooded Gum | 496647 | 6609457 | 125 | 26 | 3 | | | | | | 2 | 1 | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 75 | Flooded Gum | 496668 | 6609455 | 125 | 21 | 4 | | | | | | 3 | 1 | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 76 | Coastal Blackbutt | 496740 | 6609603 | 85 | 25 | 3 | | | | | | 3 | | | | 1 | 1 | | | | | | | | | 1 | |
| 77 | Coastal Blackbutt | 496709 | 6609634 | 100 | 26 | 2 | | | | | | 2 | | | | 1 | 1 | | | | | | | | | 1 | |
| 78 | Coastal Blackbutt | 496702 | 6609613 | 130 | 28 | 8 | | | | | | 6 | 2 | | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | 1 | |
| 79 | Coastal Blackbutt | 496664 | 6609613 | 125 | 27 | 5 | | | | | | 4 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | 1 | |
| 80 | Coastal Blackbutt | 496730 | 6609731 | 135 | 25 | 5 | | | | | | 4 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | 1 | |
| 81 | Coastal Blackbutt | 496730 | 6609731 | 100 | 25 | 3 | | | | | | 3 | | | 1 | 1 | 1 | | | | | | | | | 1 | |
| 82 | Coastal Blackbutt | 496755 | 6609744 | 115 | 19 | 5 | | | 2 | | | 3 | | | 1 | 1 | 1 | | | | | | | | | 1 | |
| 83 | Stag | 496817 | 6609694 | 90 | 15 | 11 | | | | | | 4 | 4 | 3 | | 1 | 1 | 1 | 1 | 1 | | | | | | 1 | |
| 84 | Coastal Blackbutt | 496808 | 6609699 | 120 | 27 | 9 | | | | | | 6 | 3 | | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | **1** | |
| 85 | Coastal Blackbutt | 496808 | 6609791 | 85 | 20 | 4 | | | | | | 4 | | | | 1 | 1 | | | | | | | | | **1** | |
| 86 | Red Mahogany | 496954 | 6609900 | 100 | 25 | 3 | | | | | | 3 | | | | 1 | 1 | | | | | | | | | 1 | |
| 87 | Coastal Blackbutt | 496989 | 6609986 | 120 | 23 | 10 | | | | | | 5 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | 1 | 1 | |
| 88 | Coastal Blackbutt | 496954 | 6609900 | 120 | 26 | 4 | | | | | | 4 | | | | 1 | 1 | | | | | | | | | 1 | |
| 89 | White Mahogany | 497091 | 6609977 | 45 | 17 | 3 | | | 1 | | | 2 | | | | 1 | 1 | | | | | | | | | **1** | |
| 90 | Coastal Blackbutt | 497128 | 6609976 | 120 | 26 | 7 | | | | | | 5 | 2 | | 1 | 1 | 1 | 1 | | 1 | | | | | | **1** | |
| 91 | Coastal Blackbutt | 497082 | 6609969 | 115 | 28 | 5 | | | | | | 3 | 2 | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 92 | Coastal Blackbutt | 497010 | 6610018 | 95 | 25 | 5 | | | | | | 3 | 2 | | 1 | 1 | 1 | 1 | | 1 | | | | | | **1** | |
| 93 | Coastal Blackbutt | 497002 | 6610010 | 75 | 20 | 3 | | | | | | 2 | 1 | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 94 | Coastal Blackbutt | 497002 | 6610009 | 95 | 24 | 5 | | | | | | 3 | 2 | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 95 | Coastal Blackbutt | 497154 | 6610100 | 90 | 22 | 2 | | | | | | 2 | | | 1 | 1 | 1 | | | | | | | | | **1** | |

| HBT Ref No. | Species | Easting | Northing | DBH (cm) | ~Tree Height (m) | No. Func. Holl. | Trunk Butt | Trunk Fissures | Trunk Small | Trunk Medium | Trunk Large | Limb Small | Limb Medium | Limb Large | SF | MB | SG | LG | Po | Pa | Co | SO | LFO | EB | LM | AH | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | WGS84 | WGS84 | | | | | | <5cm | 5-15 cm | >15 cm | <5cm | 5-15 cm | >15 cm | | | | | | | | | | | | | |
| 96 | Coastal Blackbutt | 497230 | 6610193 | 125 | 27 | 6 | | | 1 | | | 3 | 2 | | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | | | **1** | **1** | |
| 97 | Coastal Blackbutt | 497274 | 6610215 | 130 | 26 | 6 | | | | | | 3 | 3 | | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | | | **1** | **1** | |
| 98 | Coastal Blackbutt | 497279 | 6610216 | 125 | 27 | 10 | | | | | | 6 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | | | **1** | **1** | |
| 99 | Coastal Blackbutt | 497264 | 6610227 | 135 | 26 | 4 | | | | | | 3 | 1 | | 1 | 1 | 1 | 1 | | | | | | | | **1** | |
| 100 | Coastal Blackbutt | 497311 | 6610242 | 70 | 23 | 3 | | | | | | 2 | 1 | | 1 | 1 | 1 | 1 | | | | | | | | **1** | |
| 101 | Coastal Blackbutt | 497405 | 6610271 | 115 | 25 | 4 | | | | | | 3 | 1 | | 1 | 1 | 1 | | | 1 | | | | | | **1** | |
| 102 | Coastal Blackbutt | 497447 | 6610424 | 110 | 27 | 3 | | | | | | 3 | | | 1 | 1 | 1 | | | | | | | | | **1** | |
| 103 | Coastal Blackbutt | 497460 | 6610464 | 125 | 30 | 4 | | | | | | 4 | | | 1 | 1 | 1 | | | | | | | | | **1** | |
| 104 | Coastal Blackbutt | 497501 | 6610514 | 105 | 20 | 3 | | | | | | 3 | | | 1 | 1 | 1 | | | | | | | | | **1** | |
| 105 | Coastal Blackbutt | 497364 | 6610342 | 105 | 21 | 5 | | | | | | 3 | 2 | | 1 | 1 | 1 | 1 | | 1 | | | | | | **1** | |
| 106 | Coastal Blackbutt | 497480 | 6610595 | 125 | 30 | 3 | | | | | | 3 | | | | 1 | 1 | | | | | | | | | 1 | |
| 107 | Coastal Blackbutt | 497531 | 6610725 | 125 | 28 | 3 | | | | | | 3 | | | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | **1** | |
| 111 | Pink Bloodwood | 497515 | 6610803 | 100 | 20 | 2 | | | | | | 2 | | | | 1 | 1 | | | | | | | | | **1** | |
| 112 | Pink Bloodwood | 497541 | 6610864 | 95 | 20 | 2 | | | | | | 2 | | | | 1 | 1 | | | | | | | | | **1** | |
| 113 | White Mahogany | 497546 | 6610855 | 85 | 19 | 5 | | | 2 | | | 2 | 1 | | 1 | 1 | 1 | 1 | | 1 | | | | | | **1** | |
| 114 | Coastal Blackbutt | 497474 | 6610716 | 55 | 17 | 3 | | | | | | 3 | | | | 1 | 1 | | | | | | | | | **1** | |
| 115 | Pink Bloodwood | 497512 | 6610984 | 90 | 19 | 5 | | | 1 | | | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | | | | **1** | |
| 116 | Coastal Blackbutt | 497428 | 6611302 | 115 | 26 | 3 | | | | | | 3 | | | 1 | 1 | 1 | | | | | | | | | **1** | |
| 117 | Coastal Blackbutt | 497468 | 6611383 | 60 | 20 | 2 | | | | | | 2 | | | 1 | 1 | 1 | | | | | | | | | **1** | |
| 118 | Coastal Blackbutt | 497494 | 6612422 | 115 | 23 | 4 | | | | | | 2 | 2 | | 1 | 1 | 1 | | | | | | | | | **1** | |
| 119 | Coastal Blackbutt | 497575 | 6612692 | 125 | 20 | 4 | | | | | | 4 | | | | 1 | 1 | 1 | 1 | 1 | | | | | | **1** | |
| 120 | Coastal Blackbutt | 497559 | 6612726 | 190 | 20 | 10 | | | | | | 7 | 2 | 1 | | 1 | 1 | 1 | 1 | 1 | | | | | | **1** | |
| 121 | Coastal Blackbutt | 497593 | 6612663 | 115 | 20 | 7 | | | | | | 4 | 3 | | | 1 | 1 | 1 | 1 | 1 | | | | | | **1** | |
| 122 | Coastal Blackbutt | 497583 | 6612770 | 100 | 20 | 5 | | | 1 | 1 | | 3 | | | 1 | 1 | 1 | | | 1 | | | | | | **1** | |
| 123 | Coastal Blackbutt | 497593 | 6612767 | 125 | 21 | 5 | | | | | | 4 | 1 | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 124 | Coastal Blackbutt | 497592 | 6612780 | 95 | 21 | 3 | | | | | | 2 | 1 | | 1 | 1 | 1 | | | 1 | | | | | | 1 | |
| 125 | Coastal Blackbutt | 497593 | 6612783 | 65 | 19 | 4 | | | 1 | | | 2 | 1 | | 1 | 1 | 1 | | | 1 | | | | | | 1 | |
| 126 | Coastal Blackbutt | 497585 | 6612786 | 70 | 15 | 2 | | | | | | 2 | | | | 1 | 1 | | | | | | | | | | |
| 127 | Coastal Blackbutt | 497575 | 6612780 | 110 | 22 | 6 | | | | | | 3 | 3 | | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | 1 | |
| 128 | Coastal Blackbutt | 497594 | 6612795 | 105 | 22 | 6 | | | | | | 3 | 3 | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 129 | Coastal Blackbutt | 497590 | 6612813 | 120 | 23 | 4 | | | | | | 2 | 2 | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 130 | Stag | 497588 | 6612820 | 75 | 16 | 8 | | | | 1 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | | | 1 | 1 | |
| 131 | Coastal Blackbutt | 497594 | 6612847 | 135 | 24 | 3 | | | | | | 2 | | 1 | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 132 | Stag | 497603 | 6613003 | 40 | 10 | 2 | | 1 | | 1 | | | | | 1 | 1 | | | | | | | | | 1 | 1 | |
| 133 | Coastal Blackbutt | 497670 | 6613318 | 90 | 16 | 2 | | | | | | 1 | 1 | | 1 | 1 | 1 | 1 | | 1 | | | | | 1 | 1 | |
| 134 | Pink Bloodwood | 497675 | 6613324 | 115 | 20 | 8 | | | | | | 3 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | | | 1 | 1 | |
| 135 | Pink Bloodwood | 497690 | 6613355 | 95 | 20 | 2 | | | | | | 2 | | | | 1 | 1 | | | | | | | | | 1 | |
| 136 | Pink Bloodwood | 497681 | 6613357 | 100 | 22 | 6 | | | | | | 4 | 2 | | 1 | 1 | 1 | 1 | | | | | | | | 1 | |
| 137 | Swamp Mahogany | 497705 | 6613477 | 105 | 20 | 8 | | | 2 | 1 | | 2 | 3 | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 138 | Coastal Blackbutt | 497698 | 6613044 | 115 | 21 | 3 | | | | | | 2 | 1 | | 1 | 1 | 1 | | | | | | | | | 1 | |
| 139 | Smooth-barked Apple | 497925 | 6613554 | 40 | 14 | 2 | | | | 1 | | 1 | | | 1 | 1 | 1 | 1 | 1 | | | | | | | 1 | |
| 140 | Pink Bloodwood | 497925 | 6613556 | 90 | 21 | 6 | | | 1 | 1 | | 2 | 2 | | 1 | 1 | 1 | 1 | 1 | | | | | | | 1 | |
| 141 | Stag | 497937 | 6613578 | 90 | 22 | 9 | | | | | | 4 | 4 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | | | 1 | 1 | |
| 142 | Pink Bloodwood | 497967 | 6613591 | 80 | 19 | 3 | | | | | | | 2 | 1 | 1 | | 1 | 1 | | | | | | | | 1 | |

| HBT Ref No. | Species | Easting | Northing | DBH (cm) | ~Tree Height (m) | No. Func. Holl. | Trunk Butt | Trunk Fissures | Trunk Small | Trunk Medium | Trunk Large | Limb Small | Limb Medium | Limb Large | SF | MB | SG | LG | Po | Pa | Co | SO | LFO | EB | LM | AH | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | WGS84 | WGS84 | | | | | | <5cm | 5-15 cm | >15 cm | <5cm | 5-15 cm | >15 cm | | | | | | | | | | | | | |
| 143 | Pink Bloodwood | 497967 | 6613589 | 45 | 11 | 4 | | | 1 | | | 1 | 2 | | | 1 | 1 | 1 | | | | | | | | 1 | |
| 144 | Stag | 497971 | 6613595 | 70 | 20 | 8 | | 1 | | | | 2 | 3 | 2 | | 1 | 1 | 1 | 1 | 1 | | | | | | 1 | |
| 145 | Stag | 497971 | 6613599 | 40 | 18 | 5 | | | 1 | 1 | | 2 | 1 | | 1 | 1 | 1 | 1 | | | | | | | | 1 | |
| 146 | Stag | 497983 | 6613624 | 55 | 18 | 5 | | | 2 | 1 | | 2 | | | 1 | 1 | 1 | 1 | | | | | | | | 1 | |
| 147 | Stag | 497945 | 6613618 | 85 | 15 | 9 | | | | | | 4 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | | | 1 | | |
| 148 | Stag | 497993 | 6613630 | 30 | 10 | 3 | | | | | | | 3 | | 1 | 1 | 1 | 1 | | | | | | | | 1 | |
| 149 | Pink Bloodwood | 497996 | 6613624 | 70 | 21 | 3 | | | | | | 3 | | | 1 | 1 | 1 | | | | | | | | | 1 | |
| 150 | Pink Bloodwood | 497999 | 6613636 | 95 | 18 | 3 | | | | 1 | | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | 1 | |
| 151 | White Mahogany | 498016 | 6613675 | 110 | 22 | 7 | | | | | | 3 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | 1 | |
| 152 | Stag | 498034 | 6613673 | 75 | 18 | 11 | | | 1 | | | 4 | 2 | 4 | 1 | 1 | 1 | 1 | 1 | | | | | | | 1 | |
| 153 | Coastal Blackbutt | 498050 | 6613707 | 125 | 23 | 2 | | | | | | 2 | | | | 1 | 1 | | | | | | | | | 1 | |
| 154 | White Mahogany | 498007 | 6613724 | 90 | 18 | 3 | | | | | | 2 | 1 | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 155 | Coastal Blackbutt | 498063 | 6613762 | 110 | 17 | 5 | | | | | 1 | 2 | 2 | | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | | | 1 | 1 | |
| 156 | Pink Bloodwood | 498099 | 6613731 | 75 | 17 | 8 | | | | 1 | | 2 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | | | 1 | 1 | |
| 157 | Coastal Blackbutt | 498122 | 6613723 | 145 | 19 | 14 | | | | | | 6 | 5 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | | | 1 | 1 | |
| 158 | Coastal Blackbutt | 498119 | 6613810 | 190 | 20 | 18 | | | | | | 11 | 4 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | | | 1 | 1 | |
| 159 | White Mahogany | 498131 | 6613821 | 95 | 18 | 4 | | | | | | 2 | 2 | | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | 1 | |
| 160 | Coastal Blackbutt | 498140 | 6613823 | 140 | 19 | 13 | | | | 1 | 2 | 4 | 3 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | 1 | 1 | |
| 161 | Stag | 498154 | 6613814 | 30 | 8 | 3 | | | | | | 2 | 1 | | 1 | 1 | 1 | | | | | | | | | 1 | |
| 162 | Coastal Blackbutt | 498213 | 6613832 | 120 | 23 | 13 | | | 1 | | 1 | 7 | 4 | | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | | | 1 | 1 | |
| 163 | Swamp Mahogany | 498827 | 6614462 | 110 | 17 | 6 | | | | 2 | | 2 | 2 | | 1 | 1 | 1 | 1 | 1 | 1 | | | | | 1 | 1 | |
| 164 | Swamp Mahogany | 498820 | 6614429 | 75 | 18 | 4 | | | | | | 2 | 2 | | 1 | 1 | 1 | 1 | 1 | | | | | | | 1 | |
| 165 | Swamp Box | 498825 | 6614435 | 35 | 8 | 1 | | | | | | | | 1 | 1 | | | | 1 | | | | | | 1 | 1 | |
| 166 | Swamp Mahogany | 498806 | 6614415 | 110 | 17 | 6 | | | | | | 3 | 3 | | 1 | 1 | 1 | 1 | 1 | | | | | | | 1 | |
| 167 | Stag | 498789 | 6614399 | 75 | 12 | 12 | | | | | | 5 | 5 | 2 | 1 | | 1 | 1 | 1 | | | | | | 1 | 1 | |
| 168 | Swamp Mahogany | 498776 | 6614381 | 95 | 17 | 10 | | | 2 | | | 3 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | 1 | 1 | |
| 169 | Coastal Blackbutt | 498957 | 6614551 | 95 | 17 | 4 | | 1 | 1 | | | 2 | | | 1 | 1 | 1 | | | | | | | | 1 | 1 | |
| 170 | Coastal Blackbutt | 498949 | 6614547 | 105 | 17 | 2 | | | | | | 1 | 1 | | 1 | 1 | 1 | | | | | | | | | 1 | |
| 171 | Coastal Blackbutt | 498892 | 6614432 | 150 | 22 | 14 | | | | | | 5 | 7 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | 1 | 1 | |
| 172 | Coastal Blackbutt | 498937 | 6615080 | 100 | 24 | 4 | | | | | | 3 | 1 | | 1 | 1 | 1 | 1 | | | | | | | | 1 | Start of Blackbutt Lane |
| 173 | Coastal Blackbutt | 498941 | 6615083 | 130 | 27 | 5 | | | | | | 3 | 2 | | 1 | 1 | 1 | 1 | | | | | | | | 1 | |
| 174 | Coastal Blackbutt | 498952 | 6615098 | 130 | 27 | 7 | | | | | | 4 | 3 | | 1 | 1 | 1 | 1 | | | | | | | | 1 | |
| 175 | Coastal Blackbutt | 498958 | 6615105 | 115 | 28 | 7 | | | | | | 3 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | 1 | 1 | |
| 176 | Coastal Blackbutt | 498957 | 6615112 | 95 | 19 | 3 | | | | | | 2 | 1 | | 1 | 1 | 1 | | | | | | | | | 1 | |
| 177 | Coastal Blackbutt | 498958 | 6615113 | 100 | 25 | 4 | | | | | | 2 | 2 | | 1 | 1 | 1 | | | | | | | | | 1 | |
| 178 | Coastal Blackbutt | 498958 | 6615125 | 100 | 24 | 6 | | | | | | 5 | 1 | | 1 | 1 | 1 | | | | | | | | | 1 | |
| 179 | Coastal Blackbutt | 498950 | 6615126 | 125 | 25 | 6 | | | | | | 4 | 2 | | 1 | 1 | 1 | | | | | | | | | 1 | |
| 180 | Coastal Blackbutt | 498945 | 6615116 | 105 | 24 | 5 | | | | | | 3 | 2 | | 1 | 1 | 1 | | | | | | | | | 1 | |
| 181 | Coastal Blackbutt | 498953 | 6615148 | 105 | 27 | 5 | | | | | | 2 | 3 | | | 1 | 1 | 1 | | | | | | | | | |
| 182 | White Mahogany | 498990 | 6615059 | 140 | 23 | 19 | | | 1 | | 1 | 6 | 7 | 4 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | 1 | 1 | Rainbow Lorikeets using medium limb hollow |
| 183 | Coastal Blackbutt | 499015 | 6615108 | 135 | 24 | 9 | | | | | | 4 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | 1 | |
| 184 | White Mahogany | 499017 | 6615105 | 100 | 22 | 5 | | | | | | 3 | 2 | | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | 1 | |
| 185 | Pink Bloodwood | 499021 | 6615141 | 105 | 18 | 4 | | | | | 1 | | 2 | 1 | | | | | 1 | | | 1 | | | 1 | 1 | |
| 186 | Pink Bloodwood | 499034 | 6615132 | 80 | 13 | 4 | | | | | | | 2 | 2 | | | | | 1 | | | 1 | | | 1 | 1 | |

| HBT Ref No. | Species | Easting | Northing | DBH (cm) | ~Tree Height (m) | No. Func. Holl. | Trunk Butt | Trunk Fissures | Trunk Small | Trunk Medium | Trunk Large | Limb Small | Limb Medium | Limb Large | SF | MB | SG | LG | Po | Pa | Co | SO | LFO | EB | LM | AH | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | WGS84 | WGS84 | | | | | | <5cm | 5-15 cm | >15 cm | <5cm | 5-15 cm | >15 cm | | | | | | | | | | | | | |
| 187 | Coastal Blackbutt | 499084 | 6615168 | 135 | 25 | 3 | | | | | | 3 | | | | 1 | 1 | | | | | | | | | 1 | |
| 188 | White Mahogany | 499062 | 6615145 | 140 | 22 | 14 | | | | | | 7 | 4 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | 1 | 1 | |
| 189 | Pink Bloodwood | 499112 | 6615207 | 95 | 20 | 16 | | | | 1 | 1 | 7 | 3 | 4 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | 1 | 1 | |
| 190 | Coastal Blackbutt | 499159 | 6615251 | 150 | 20 | 19 | | | | | | 5 | 6 | 8 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | 1 | 1 | |
| 191 | Stag | 499139 | 6615265 | 30 | 8 | 3 | | | | 1 | | | 2 | | 1 | | | | | | | | | | 1 | 1 | |
| 192 | Coastal Blackbutt | 499122 | 6615259 | 100 | 21 | 2 | | | | | | | 1 | 1 | 1 | | 1 | 1 | 1 | 1 | | | | | | 1 | |
| 193 | Coastal Blackbutt | 499113 | 6615259 | 100 | 21 | 10 | | | | | | 5 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | 1 | |
| 194 | Coastal Blackbutt | 499113 | 6615258 | 105 | 22 | 4 | | | | | | 2 | 2 | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 195 | Coastal Blackbutt | 499106 | 6615234 | 105 | 22 | 7 | | | | | | 4 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | 1 | |
| 196 | Coastal Blackbutt | 499098 | 6615226 | 85 | 23 | 4 | | | | | | | 3 | 1 | 1 | 1 | 1 | | | | | | | | | 1 | |
| 197 | Coastal Blackbutt | 499095 | 6615225 | 100 | 24 | 4 | | | | | | 3 | 1 | | 1 | 1 | 1 | | | | | | | | | 1 | |
| 198 | Coastal Blackbutt | 499096 | 6615249 | 135 | 24 | 5 | | | | | | 3 | 2 | | 1 | 1 | 1 | | | | | | | | | 1 | |
| 199 | Coastal Blackbutt | 499075 | 6615269 | 85 | 16 | 2 | | | | | 1 | | 1 | | 1 | | 1 | 1 | 1 | | | | | | 1 | 1 | |
| 200 | Coastal Blackbutt | 499067 | 6615238 | 115 | 23 | 3 | | | | | | 2 | 1 | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 201 | Coastal Blackbutt | 499051 | 6615224 | 135 | 23 | 7 | | | | | | 4 | 3 | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 202 | Stag | 499049 | 6615216 | 40 | 6 | 2 | | 1 | | | 1 | | | | 1 | | | | | | | | | | 1 | | |
| 203 | Coastal Blackbutt | 499047 | 6615219 | 110 | 23 | 2 | | | | | | | 2 | | | | 1 | 1 | 1 | 1 | | | | | | | |
| 204 | Coastal Blackbutt | 499024 | 6615228 | 135 | 23 | 7 | | | | | | 5 | 2 | | 1 | 1 | 1 | 1 | | | | | | | | 1 | |
| 205 | Coastal Blackbutt | 499012 | 6615219 | 165 | 23 | 19 | | | 3 | 2 | | 4 | 6 | 4 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | 1 | 1 | Native bees using small limb hollow |
| 206 | Coastal Blackbutt | 499015 | 6615216 | 105 | 25 | 8 | | | 2 | 3 | | | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | | | 1 | 1 | |
| 207 | Coastal Blackbutt | 498994 | 6615198 | 110 | 18 | 5 | | | | | | 2 | 3 | | 1 | 1 | 1 | 1 | 1 | | | | | | | 1 | |
| 208 | Coastal Blackbutt | 498996 | 6615171 | 90 | 21 | 5 | | | | | | 3 | 2 | | 1 | 1 | 1 | 1 | 1 | | | | | | | 1 | |
| 209 | Coastal Blackbutt | 498990 | 6615156 | 120 | 23 | 6 | | | | | | 4 | 2 | | 1 | 1 | 1 | 1 | 1 | | | | | | | 1 | |
| 210 | Coastal Blackbutt | 499005 | 6615145 | 105 | 23 | 7 | | | | | | 5 | 2 | | 1 | 1 | 1 | 1 | 1 | | | | | | | 1 | End of Blackbutt Lane HBT's |
| 211 | Coastal Blackbutt | 499368 | 6615422 | 95 | 20 | 2 | | | | | | 1 | 1 | | 1 | 1 | 1 | 1 | | | | | | | | 1 | |
| 212 | White Mahogany | 499202 | 6615299 | 125 | 20 | 20 | | | | 1 | 1 | 8 | 6 | 4 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | 1 | 1 | |
| 213 | Coastal Blackbutt | 499202 | 6615305 | 60 | 19 | 3 | | | | | | 2 | 1 | | 1 | 1 | 1 | 1 | | | | | | | | 1 | |
| 214 | Coastal Blackbutt | 499225 | 6615367 | 115 | 22 | 8 | | | 1 | | | 3 | 4 | | 1 | 1 | 1 | 1 | | | | | | | | 1 | Scaly and Rainbows using hollows |
| 215 | Coastal Blackbutt | 499252 | 6615373 | 105 | 20 | 7 | | | | | | 3 | 4 | | 1 | 1 | 1 | 1 | | | | | | | | 1 | |
| 216 | Coastal Blackbutt | 499262 | 6615371 | 90 | 20 | 7 | | | | | | 4 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | 1 | |
| 217 | Coastal Blackbutt | 499409 | 6615588 | 125 | 23 | 4 | | | | | | 3 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | 1 | |
| 218 | Coastal Blackbutt | 499459 | 6615620 | 140 | 23 | 8 | | | | | | 5 | 3 | | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | 1 | |
| 219 | Pink Bloodwood | 499445 | 6615643 | 75 | 16 | 3 | | | | | | 3 | | | 1 | 1 | 1 | | | | | | | | | 1 | |
| 220 | Coastal Blackbutt | 499503 | 6615680 | 140 | 21 | 8 | | | | | | 5 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | | | 1 | 1 | |
| 221 | Coastal Blackbutt | 499527 | 6615706 | 105 | 20 | 3 | | | | | | 2 | 1 | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 222 | Swamp Mahogany | 499535 | 6615740 | 105 | 14 | 5 | | | | 2 | 1 | 2 | | | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | 1 | |
| 223 | Coastal Blackbutt | 499706 | 6615810 | 90 | 17 | 3 | | | | | | 3 | | | 1 | 1 | 1 | | | | | | | | | 1 | |
| 224 | Coastal Blackbutt | 499703 | 6615802 | 135 | 17 | 8 | | | | | | 5 | 3 | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 225 | Coastal Blackbutt | 499796 | 6615908 | 130 | 17 | 6 | | | | | | 3 | 3 | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 226 | Coastal Blackbutt | 499803 | 6615989 | 130 | 18 | 10 | | | | | | 4 | 4 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | | 1 | open hive in branch |
| 227 | Coastal Blackbutt | 499842 | 6616106 | 130 | 22 | 9 | | | | | | 4 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | 1 | tree not marked as beside house to east of large dam |
| 228 | Coastal Blackbutt | 500225 | 6616506 | 190 | 19 | 5 | | | | | | 3 | 2 | | 1 | 1 | 1 | 1 | | | | | | | | 1 | |
| 229 | Coastal Blackbutt | 500188 | 6616454 | 155 | 17 | 5 | | | | | | 3 | 2 | | 1 | 1 | 1 | 1 | | | | | | | | 1 | |
| 230 | Coastal Blackbutt | 500163 | 6616404 | 115 | 17 | 7 | | | | | | 4 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | 1 | 1 | |

| HBT Ref No. | Species | Easting | Northing | DBH (cm) | ~Tree Height (m) | No. Func. Holl. | Trunk Butt | Trunk Fissures | Trunk Small | Trunk Medium | Trunk Large | Limb Small | Limb Medium | Limb Large | SF | MB | SG | LG | Po | Pa | Co | SO | LFO | EB | LM | AH | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | WGS84 | WGS84 | | | | | | <5cm | 5-15 cm | >15 cm | <5cm | 5-15 cm | >15 cm | | | | | | | | | | | | | |
| 231 | Stag | 500161 | 6616406 | 35 | 9 | 3 | | | 1 | 1 | 1 | | | | 1 | | 1 | 1 | | | | | | | 1 | 1 | |
| 232 | Coastal Blackbutt | 500151 | 6616378 | 115 | 17 | 12 | | | | | | 7 | 4 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | 1 | 1 | |
| 233 | Coastal Blackbutt | 500037 | 6616353 | 95 | 16 | 6 | 1 | | | | 1 | 2 | 2 | | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | 1 | Antechinus scats at base |
| 234 | Small-fruited Grey Gum | 500015 | 6616367 | 85 | 19 | 3 | | | | | | 3 | | | 1 | 1 | 1 | | | | | | | | | 1 | |
| 235 | Swamp Mahogany | 500213 | 6616568 | 90 | 14 | 5 | | | | | | | 2 | 3 | 1 | 1 | 1 | | | | | | | | | 1 | |
| 236 | Swamp Mahogany | 500214 | 6616571 | 70 | 14 | 4 | | | | | | 3 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | | | 1 | 1 | |
| 237 | Stag | 500251 | 6616664 | 135 | 13 | 10 | 1 | | | | 1 | 3 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | | | 1 | 1 | Oyster Creek area from here |
| 238 | Tallowwood | 500255 | 6616669 | 95 | 19 | 2 | | | | | | 1 | 1 | | 1 | 1 | 1 | 1 | | | | | | | | 1 | |
| 239 | Stag | 500260 | 6616687 | 75 | 15 | 7 | | | | | | 3 | 4 | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 240 | Narrow-leaved Red Gum | 500265 | 6616713 | 95 | 20 | 5 | | | | 2 | | 2 | 1 | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 241 | Coastal Blackbutt | 500272 | 6616731 | 105 | 21 | 4 | | | | | | 2 | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 242 | Stag | 500267 | 6616743 | 40 | 18 | 9 | | | | | | 2 | 7 | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 243 | Coastal Blackbutt | 500356 | 6616969 | 100 | 24 | 4 | | | | | | 2 | 2 | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 244 | Tallowwood | 500365 | 6616934 | 220 | 28 | 21 | | | | | 3 | 5 | 4 | 9 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | using large limb hollow |
| 245 | Coastal Blackbutt | 500381 | 6616938 | 95 | 26 | 4 | | | | | | 2 | 2 | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 246 | Coastal Blackbutt | 500371 | 6616915 | 105 | 24 | 4 | | | | | | 3 | 1 | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 247 | Coastal Blackbutt | 500371 | 6616915 | 85 | 21 | 5 | | | 2 | | | 2 | 1 | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 248 | Coastal Blackbutt | 500378 | 6616908 | 105 | 24 | 6 | 1 | | 1 | | 1 | 2 | 1 | | 1 | 1 | 1 | 1 | | 1 | | | | | 1 | 1 | |
| 249 | Coastal Blackbutt | 500382 | 6616904 | 80 | 19 | 2 | | | | | | 2 | | | 1 | 1 | | | | | | | | | | 1 | |
| 250 | Coastal Blackbutt | 500358 | 6616902 | 105 | 24 | 5 | 1 | | | | | 3 | 1 | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 251 | Stag | 500357 | 6616894 | 95 | 16 | 8 | | | | | | 2 | 3 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | | | 1 | 1 | |
| 252 | Coastal Blackbutt | 500343 | 6616879 | 110 | 24 | 6 | | | | | | 3 | 3 | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | lots of small black ants unknown if they using the canopy but tree may have low occupancy rates |
| 253 | Coastal Blackbutt | 500348 | 6616867 | 130 | 24 | 5 | | | | | | 3 | 2 | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 254 | Coastal Blackbutt | 500343 | 6616864 | 205 | 20 | 9 | | | | | 4 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | 1 | head of tree broken in recent storm |
| 255 | Coastal Blackbutt | 500345 | 6616832 | 105 | 24 | 4 | | | | | | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | 1 | 1 | |
| 256 | Coastal Blackbutt | 500348 | 6616833 | 100 | 21 | 4 | | | | | | 2 | 2 | | 1 | 1 | 1 | 1 | 1 | 1 | | | | | 1 | 1 | |
| 257 | Stag | 500322 | 6616818 | 105 | 20 | 9 | | | | | 1 | 3 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | 1 | 1 | |
| 258 | Pink Bloodwood | 500320 | 6616819 | 105 | 22 | 4 | | | | | | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | 1 | 1 | |
| 259 | Coastal Blackbutt | 500337 | 6616817 | 60 | 21 | 2 | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | 1 | |
| 260 | Coastal Blackbutt | 500316 | 6616824 | 115 | 22 | 5 | | | | | | 2 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | 1 | |
| 261 | Stag | 500306 | 6616786 | 95 | 22 | 11 | | | | 1 | 1 | 4 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | | | 1 | 1 | |
| 262 | Coastal Blackbutt | 500319 | 6616786 | 140 | 24 | 7 | | | | | | 4 | 3 | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 263 | Coastal Blackbutt | 500302 | 6616755 | 140 | 23 | 19 | | 1 | 2 | | | 7 | 8 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | 1 | 1 | bees using trunk fissure of dead leader |
| 264 | Stag | 500292 | 6616761 | 90 | 23 | 9 | | | 1 | 1 | | 1 | 1 | 5 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | 1 | 1 | |
| 265 | Flooded Gum | 500282 | 6616630 | 85 | 26 | 7 | | | | 2 | 2 | 3 | | | 1 | 1 | 1 | | | | | | | | | 1 | eastern side of road |
| 266 | Stag | 500332 | 6616701 | 70 | 11 | 0 | | | | | | | | | 1 | | | | 1 | | | | | | 1 | 1 | |
| 267 | Coastal Blackbutt | 500332 | 6616701 | 110 | 23 | 5 | | | | | | 3 | 2 | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 268 | Coastal Blackbutt | 500350 | 6616700 | 95 | 23 | 3 | | | | | | 3 | | | 1 | 1 | 1 | | | | | | | | | 1 | |
| 269 | Coastal Blackbutt | 500356 | 6616726 | 110 | 21 | 5 | | | | | | 3 | 2 | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 270 | Coastal Blackbutt | 500383 | 6616787 | 100 | 21 | 6 | | | 1 | 1 | | 2 | 2 | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 271 | Coastal Blackbutt | 500383 | 6616793 | 120 | 24 | 11 | | | | | | 5 | 3 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | 1 | 1 | |
| 272 | Coastal Blackbutt | 500374 | 6616805 | 110 | 23 | 3 | | | | | | 3 | | | 1 | 1 | 1 | | | | | | | | | 1 | |
| 273 | Coastal Blackbutt | 500429 | 6616843 | 115 | 26 | 4 | | | | | | 3 | 1 | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | ref tree to south of driveway |
| 274 | Stag | 500450 | 6616919 | 65 | 12 | 7 | | 1 | | | | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | 1 | 1 | |

| HBT Ref No. | Species | Easting | Northing | DBH (cm) | ~Tree Height (m) | No. Func. Holl. | Trunk Butt | Trunk Fissures | Trunk Small | Trunk Medium | Trunk Large | Limb Small | Limb Medium | Limb Large | SF | MB | SG | LG | Po | Pa | Co | SO | LFO | EB | LM | AH | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | WGS84 | WGS84 | | | | | | <5cm | 5-15 cm | >15 cm | <5cm | 5-15 cm | >15 cm | | | | | | | | | | | | | |
| 275 | Coastal Blackbutt | 500460 | 6616920 | 65 | 21 | 2 | | | | | | 1 | 1 | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 276 | Coastal Blackbutt | 500531 | 6617092 | 100 | 19 | 2 | | | | | | 1 | 1 | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 277 | White Mahogany | 500531 | 6617292 | 105 | 20 | 4 | | | | | | 3 | 1 | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 278 | Coastal Blackbutt | 500479 | 6617156 | 70 | 12 | 2 | 1 | | | | 1 | | | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 279 | Coastal Blackbutt | 500463 | 6617170 | 135 | 23 | 13 | | | | | | 4 | 5 | 4 | | 1 | | | 1 | | | | | | 1 | | |
| 280 | Turpentine Stag | 500475 | 6617153 | 40 | 8 | 7 | | 1 | | 1 | | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | 1 | 1 | |
| 281 | Stag | 500466 | 6617152 | 70 | 15 | 16 | | 1 | | 2 | 3 | 3 | 4 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | | | 1 | 1 | |
| 282 | Coastal Blackbutt | 500451 | 6617125 | 135 | 19 | 11 | 1 | | | | 3 | 3 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | 1 | roost grove of trees nearby for things like Powerful owl, Saltsaurus gecko skin in basal hollow |
| 283 | Coastal Blackbutt | 500445 | 6617083 | 110 | 22 | 8 | | | | 3 | | 4 | 1 | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 284 | Pink Bloodwood | 500441 | 6617076 | 35 | 9 | 10 | | | 1 | | | 3 | 4 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | | | 1 | 1 | stag stage |
| 285 | Coastal Blackbutt | 500425 | 6617030 | 230 | 23 | 32 | | | 1 | | 1 | 10 | 11 | 9 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | 1 | very good tree for owls |
| 286 | Pink Bloodwood | 500411 | 6616991 | 105 | 11 | 5 | | | | | | | 2 | 3 | 1 | | | | 1 | | | | | | 1 | 1 | these hollows are low 3 and 6 respectively |
| 287 | Coastal Blackbutt | 500413 | 6616988 | 110 | 22 | 6 | | | | | | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | 1 | 1 | |
| 288 | Coastal Blackbutt | 500438 | 6616978 | 135 | 22 | 19 | | | | | | 9 | 6 | 4 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | 1 | 1 | native bees using small limb hollow |
| 289 | Coastal Blackbutt | 500441 | 6616967 | 150 | 24 | 18 | | | | 1 | 1 | 8 | 5 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | 1 | 1 | on edge of highway |
| 290 | Coastal Blackbutt | 500419 | 6616966 | 130 | 22 | 9 | | | | | | 5 | 4 | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 291 | Coastal Blackbutt | 500412 | 6616939 | 100 | 21 | 4 | | | | | | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | 1 | 1 | |
| 292 | Pink Bloodwood | 500395 | 6616936 | 100 | 18 | 6 | | | | | | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | 1 | 1 | |
| 293 | Coastal Blackbutt | 500428 | 6616927 | 125 | 22 | 4 | | | | | | 4 | | | | 1 | 1 | | | | | | | | | 1 | |
| 294 | Coastal Blackbutt | 500457 | 6617540 | 105 | 21 | 4 | | | | | | 2 | 2 | | 1 | 1 | 1 | 1 | | | | | | | | 1 | |
| 295 | Swamp Mahogany | 500481 | 6617486 | 95 | 20 | 5 | | | | | | 2 | 2 | 1 | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 296 | Swamp Mahogany | 500474 | 6617468 | 60 | 17 | 2 | | | | 1 | 1 | | | | | | | | 1 | | 1 | | | | 1 | | |
| 297 | Coastal Blackbutt | 500466 | 6617458 | 105 | 24 | 6 | | | | | | 4 | 2 | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 298 | Coastal Blackbutt | 500474 | 6617431 | 105 | 23 | 6 | | | | | | 4 | 2 | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 299 | Coastal Blackbutt | 500471 | 6617428 | 120 | 23 | 3 | | | | | | 3 | | | | 1 | 1 | | | | | | | | | 1 | |
| 300 | Pink Bloodwood | 500462 | 6617418 | 55 | 14 | 6 | | | | | | 2 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | 1 | 1 | |
| 301 | Coastal Blackbutt | 500472 | 6617380 | 110 | 23 | 3 | | | | | | 2 | 1 | | 1 | 1 | 1 | 1 | | | | | | | | 1 | |
| 302 | Turpentine | 500471 | 6617380 | 50 | 14 | 1 | | | | | 1 | | | | 1 | | | | | | | | | | 1 | | very low at 2 mts |
| 303 | Coastal Blackbutt | 500476 | 6617360 | 110 | 22 | 9 | | 1 | | 1 | | 2 | 3 | 2 | 1 | 1 | 1 | 1 | | | | | | | | 1 | |
| 304 | Stag | 500487 | 6617336 | 65 | 16 | 10 | | | | | 1 | 3 | 4 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | 1 | 1 | |
| 305 | Stag | 500496 | 6617325 | 45 | 9 | 1 | | | | | | 1 | | | | 1 | | | 1 | | | | | | 1 | | Broken at the base |
| 306 | Pink Bloodwood | 500472 | 6617333 | 115 | 26 | 5 | | | | | | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | |
| 307 | Pink Bloodwood | 500458 | 6617303 | 100 | 23 | 10 | | | | | | 4 | 3 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | 1 | 1 | |
| 308 | Stag | 500459 | 6617285 | 40 | 11 | 1 | | | | | 1 | | | | | | | | 1 | | | | | | 1 | | |
| 309 | Coastal Blackbutt | 500441 | 6617380 | 115 | 26 | 7 | | | | | | 5 | 2 | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | Oyster Creek Finish |
| 310 | Coastal Blackbutt | 500516 | 6617717 | 125 | 27 | 3 | | | | | | 3 | | | 1 | 1 | 1 | | | | | | | | | 1 | |
| 311 | Coastal Blackbutt | 500504 | 6617728 | 125 | 24 | 8 | | | | | | 3 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | 1 | |
| 312 | Turpentine | 500463 | 6617662 | 115 | 20 | 3 | | 1 | | | | 2 | | | 1 | 1 | 1 | | | | | | | | | 1 | |
| 313 | Coastal Blackbutt | 500440 | 6617802 | 160 | 25 | 10 | | | | | | 4 | 3 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | 1 | 1 | |
| 314 | Coastal Blackbutt | 500466 | 6617832 | 145 | 22 | 9 | | | | | | 3 | 4 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | 1 | 1 | |
| 315 | Coastal Blackbutt | 500409 | 6617860 | 100 | 21 | 6 | | | | | | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | 1 | 1 | shallow large hollow |
| 316 | Coastal Blackbutt | 500495 | 6617805 | 90 | 24 | 4 | | | | | | 2 | 2 | | 1 | 1 | 1 | 1 | 1 | 1 | | | | | 1 | 1 | |
| 317 | Stag | 500508 | 6617849 | 105 | 11 | 3 | | | | | 1 | | | 2 | | 1 | | | 1 | | | | | | 1 | 1 | |
| 318 | Coastal Blackbutt | 500513 | 6617856 | 110 | 24 | 3 | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | | | 1 | 1 | |

| HBT Ref No. | Species | Easting | Northing | DBH (cm) | ~Tree Height (m) | No. Func. Holl. | Trunk Butt | Trunk Fissures | Trunk Small | Trunk Medium | Trunk Large | Limb Small | Limb Medium | Limb Large | SF | MB | SG | LG | Po | Pa | Co | SO | LFO | EB | LM | AH | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | WGS84 | WGS84 | | | | | | <5cm | 5-15 cm | >15 cm | <5cm | 5-15 cm | >15 cm | | | | | | | | | | | | | |
| 319 | Coastal Blackbutt | 500514 | 6617850 | 95 | 20 | 4 | | | | | | 4 | | | 1 | 1 | 1 | | | | | | | | | 1 | |
| 320 | Pink Bloodwood | 500492 | 6617887 | 115 | 18 | 12 | | | | | 1 | 4 | 3 | 4 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | 1 | 1 | |
| 321 | Pink Bloodwood | 500514 | 6617901 | 110 | 19 | 7 | | | | | | 3 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | 1 | 1 | |
| 322 | Pink Bloodwood | 500476 | 6617950 | 130 | 24 | 6 | | | 1 | | | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | 1 | 1 | |
| 323 | Coastal Blackbutt | 500472 | 6617956 | 100 | 24 | 6 | | | | | | 3 | 3 | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 324 | Swamp Mahogany | 500447 | 6617980 | 130 | 21 | 4 | | | | | | 2 | 2 | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 325 | Pink Bloodwood | 500466 | 6618042 | 90 | 16 | 7 | | | 1 | 2 | | 3 | 1 | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 326 | White Mahogany | 500419 | 6618126 | 130 | 22 | 11 | | | | | | 5 | 3 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | 1 | |
| 327 | Tallowwood | 500419 | 6618158 | 170 | 21 | 28 | | | | | | 13 | 11 | 4 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | 1 | 1 | |
| 328 | Stag | 500406 | 6618146 | 50 | 11 | 7 | | 1 | 2 | | | 3 | 1 | | 1 | 1 | 1 | | | | | | | | | 1 | |
| 329 | Coastal Blackbutt | 500395 | 6618119 | 125 | 22 | 8 | | | | | | 5 | 3 | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | twin trunk tree |
| 330 | Coastal Blackbutt | 500387 | 6618127 | 105 | 24 | 6 | | | | | | 3 | 3 | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 331 | Coastal Blackbutt | 500411 | 6618085 | 120 | 25 | 5 | | | | | | 3 | 2 | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 332 | Coastal Blackbutt | 500441 | 6618093 | 100 | 26 | 7 | | | 1 | | | 3 | 3 | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | Sugar Glider at base of tree |
| 333 | Coastal Blackbutt | 500449 | 6618092 | 115 | 25 | 14 | | | | | | 5 | 7 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | 1 | 1 | |
| 334 | Coastal Blackbutt | 500442 | 6618079 | 105 | 24 | 5 | | | | | | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | 1 | 1 | |
| 335 | Tallowwood | 500412 | 6618192 | 95 | 22 | 2 | | | | | | 2 | | | 1 | 1 | 1 | | | | | | | | | 1 | |
| 336 | Coastal Blackbutt | 500396 | 6618227 | 95 | 19 | 3 | | | | | | 3 | | | 1 | 1 | 1 | | | | | | | | | 1 | |
| 337 | Coastal Blackbutt | 500378 | 6618239 | 125 | 21 | 4 | | | | | | 2 | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 338 | Coastal Blackbutt | 500378 | 6618208 | 100 | 21 | 5 | | | | | | 3 | 2 | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 339 | Coastal Blackbutt | 500386 | 6618201 | 105 | 21 | 6 | | | | | | 4 | 2 | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 340 | White Mahogany | 500445 | 6618028 | 120 | 22 | 8 | | | 2 | | | 3 | 3 | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | tree not flagged growing in swamp |
| 341 | Coastal Blackbutt | 500437 | 6618581 | 125 | 29 | 4 | | | | | | 2 | 2 | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 342 | Coastal Blackbutt | 500451 | 6618553 | 110 | 28 | 3 | | | | | | 2 | | 1 | 1 | 1 | 1 | | 1 | 1 | | | | | | 1 | |
| 343 | Turpentine | 500433 | 6618516 | 115 | 15 | 6 | | 1 | 2 | 1 | | 1 | | 1 | 1 | 1 | | | 1 | | | | | | 1 | 1 | |
| 344 | Coastal Blackbutt | 500467 | 6618502 | 85 | 23 | 4 | | | | | | 2 | 2 | | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | 1 | |
| 345 | Coastal Blackbutt | 500471 | 6618398 | 115 | 26 | 3 | | | | | | 3 | | | 1 | 1 | 1 | | | | | | | | | 1 | east of road |
| 346 | Coastal Blackbutt | 500490 | 6618450 | 130 | 28 | 6 | | | | | | 3 | 3 | | 1 | 1 | 1 | 1 | | 1 | | | | | 1 | 1 | east of road |
| 347 | Coastal Blackbutt | 500548 | 6618778 | 125 | 21 | 13 | 1 | | | | 2 | 6 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | 1 | 1 | |
| 348 | Coastal Blackbutt | 500496 | 6619148 | 85 | 22 | 4 | | | | | | 3 | 1 | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 349 | Coastal Blackbutt | 500502 | 6619151 | 65 | 20 | 5 | | | | | | 4 | 1 | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 350 | Coastal Blackbutt | 500504 | 6619155 | 105 | 20 | 7 | | | | | | 5 | 2 | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 351 | Coastal Blackbutt | 500529 | 6619170 | 120 | 23 | 14 | | | | | | 7 | 4 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | 1 | 1 | |
| 352 | Coastal Blackbutt | 500516 | 6619370 | 60 | 17 | 2 | | | | | | 2 | | | 1 | 1 | 1 | | | | | | | | | 1 | eastern side on boundary so ref tree |
| 353 | Coastal Blackbutt | 500462 | 6619353 | 110 | 24 | 7 | | | 1 | 1 | | 4 | 1 | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 354 | Coastal Blackbutt | 500474 | 6619313 | 100 | 20 | 5 | | | | | | 3 | 2 | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 355 | Coastal Blackbutt | 500472 | 6619318 | 110 | 26 | 7 | | | | | | 4 | 3 | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 356 | Pink Bloodwood | 500450 | 6619191 | 110 | 25 | 5 | | | | | | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | 1 | |
| 357 | Coastal Blackbutt | 500464 | 6619166 | 115 | 19 | 14 | 1 | | | | | 3 | 4 | 6 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | 1 | |
| 358 | Stag | 500464 | 6619136 | 75 | 24 | 10 | | | | | | 7 | 3 | | 1 | 1 | 1 | 1 | | | | | | | | 1 | |
| 359 | Coastal Blackbutt | 500468 | 6619115 | 105 | 24 | 6 | | | | | | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | 1 | |
| 360 | Coastal Blackbutt | 500455 | 6619106 | 100 | 27 | 4 | | | | | | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | 1 | | 1 | 1 | native bees using small limb leader |
| 361 | Coastal Blackbutt | 500459 | 6619101 | 110 | 27 | 4 | | | | | | 3 | 1 | | 1 | 1 | 1 | 1 | | | | | | | | 1 | |
| 362 | Coastal Blackbutt | 500463 | 6619028 | 105 | 21 | 8 | | | | | | 4 | 4 | | 1 | 1 | 1 | 1 | | | | | | | | 1 | |

| HBT Ref No. | Species | Easting | Northing | DBH (cm) | ~Tree Height (m) | No. Func. Holl. | Trunk Butt | Trunk Fissures | Trunk Small | Trunk Medium | Trunk Large | Limb Small | Limb Medium | Limb Large | SF | MB | SG | LG | Po | Pa | Co | SO | LFO | EB | LM | AH | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | WGS84 | WGS84 | | | | | | <5cm | 5-15 cm | >15 cm | <5cm | 5-15 cm | >15 cm | | | | | | | | | | | | | |
| 363 | Pink Bloodwood | 500462 | 6619029 | 45 | 19 | 1 | | | | 1 | | | | | 1 | | | | | | | | | | | 1 | medium trunk only 2.5 m above ground |
| 364 | Coastal Blackbutt | 500471 | 6618968 | 130 | 24 | 17 | | | | | | 9 | 5 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | 1 | 1 | |
| 365 | Coastal Blackbutt | 500462 | 6618992 | 115 | 20 | 8 | | | | | | 4 | 4 | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 366 | Coastal Blackbutt | 500429 | 6618987 | 125 | 25 | 6 | | | | | | 4 | 2 | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 367 | Coastal Blackbutt | 500441 | 6618951 | 125 | 22 | 9 | | | | | | 7 | 2 | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 368 | Pink Bloodwood | 500453 | 6618929 | 100 | 21 | 3 | | | | 1 | | 2 | | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 369 | Coastal Blackbutt | 500450 | 6618846 | 125 | 26 | 8 | | | | | | 2 | 4 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | 1 | |
| 370 | Stag | 500459 | 6618808 | 95 | 13 | 2 | | 1 | | | 1 | | | | 1 | 1 | | | 1 | | | | | | 1 | 1 | |
| 371 | Flooded Gum | 500491 | 6618726 | 85 | 21 | 3 | | | | 1 | | 2 | | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 372 | Coastal Blackbutt | 500476 | 6618662 | 105 | 26 | 7 | | | | | | 4 | 3 | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 373 | Coastal Blackbutt | 500471 | 6618677 | 110 | 28 | 4 | | | | | | 2 | 2 | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 374 | Stag | 500472 | 6618673 | 85 | 23 | 14 | | | | | | 4 | 7 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | | | 1 | 1 | |
| 375 | Coastal Blackbutt | 500402 | 6618691 | 125 | 27 | 5 | | | | | | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | | | 1 | 1 | |
| 376 | Coastal Blackbutt | 500406 | 6618725 | 130 | 28 | 4 | | | | | | 3 | 1 | | 1 | 1 | 1 | 1 | 1 | | | | | | 1 | 1 | |
| 377 | Flooded Gum | 500377 | 6618804 | 70 | 21 | 2 | | | | | | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | | | | | | 1 | 1 | |
| 378 | Coastal Blackbutt | 500383 | 6618876 | 130 | 29 | 10 | | | | | | 5 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | 1 | 1 | |
| 379 | Coastal Blackbutt | 500383 | 6618848 | 140 | 29 | 4 | | | | | | 4 | | | 1 | 1 | 1 | | | | | | | | | 1 | |
| 380 | Coastal Blackbutt | 500394 | 6618856 | 120 | 21 | 4 | | | | | | 3 | 1 | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 381 | Coastal Blackbutt | 500424 | 6619933 | 125 | 28 | 5 | | | | | | 3 | 2 | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 382 | Flooded Gum | 500442 | 6619952 | 70 | 24 | 1 | | | | | | 1 | | | | 1 | | | | | | | | | | 1 | |
| 383 | Flooded Gum | 500429 | 6619966 | 115 | 32 | 6 | | | | | | 4 | 2 | | | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 384 | Flooded Gum | 500395 | 6619968 | 135 | 31 | 9 | | | | | | 5 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | 1 | |
| 385 | Stag | 500472 | 6620319 | 35 | 9 | 1 | | | | | 1 | | | | 1 | | | | | | | | | | 1 | | |
| 386 | Stag | 500398 | 6620567 | 80 | 28 | 2 | | | | | | 2 | | | | 1 | 1 | | | | | | | | | | |
| 387 | Tallowwood | 500402 | 6620965 | 55 | 14 | 1 | | | | | 1 | | | | 1 | | | | | | | | | | 1 | 1 | |
| 388 | Coastal Blackbutt | 500352 | 6621145 | 125 | 26 | 4 | | | | | | 3 | 1 | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | potential glider crossing tree |
| 389 | Coastal Blackbutt | 499927 | 6621573 | 105 | 23 | 13 | | | | | 1 | 7 | 4 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | 1 | 1 | |
| 390 | Coastal Blackbutt | 499519 | 6622216 | 80 | 22 | 3 | | | | | | 2 | 1 | | 1 | 1 | 1 | 1 | | 1 | | | | | | | Ainsworth Cut area |
| 391 | Grey Ironbark | 499559 | 6622142 | 135 | 30 | 8 | | | | | | 4 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | 1 | 1 | gully |
| 392 | White Mahogany | 499558 | 6622166 | 95 | 23 | 4 | | | | | | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | 1 | 1 | gully |
| 393 | Coastal Blackbutt | 499524 | 6622259 | 100 | 24 | 5 | | | | | | 3 | 2 | | 1 | 1 | 1 | 1 | 1 | | | | | | | 1 | |
| 394 | Grey Ironbark | 499564 | 6622184 | 110 | 22 | 4 | | | | | 1 | 2 | | 1 | 1 | 1 | | | 1 | | | | | | 1 | | large hollow probably just a cavity |
| 396 | Stag | 499461 | 6622301 | 35 | 6 | 1 | | | | | 1 | | | | 1 | | | | 1 | | | | | | 1 | 1 | |
| 397 | Coastal Blackbutt | 499397 | 6622319 | 100 | 25 | 3 | | | | | | 3 | | | | 1 | 1 | | | | | | | | | 1 | |
| 398 | Coastal Blackbutt | 499711 | 6621926 | 80 | 23 | 3 | | | | | | 2 | 1 | | 1 | 1 | 1 | 1 | | | | | | | | 1 | |
| 399 | Small-fruited Grey Gum | 499647 | 6621984 | 85 | 27 | 8 | | | | | | 3 | 3 | 2 | | 1 | 1 | 1 | 1 | 1 | | | | | | 1 | |
| 400 | Coastal Blackbutt | 499622 | 6621971 | 85 | 25 | 4 | | | | | | 3 | 1 | | 1 | 1 | 1 | 1 | | | | | | | | 1 | |
| 401 | Tallowwood | 499634 | 6621989 | 85 | 23 | 4 | | | | | | 2 | 2 | | 1 | 1 | 1 | 1 | | | | | | | | 1 | |
| 402 | Coastal Blackbutt | 499612 | 6622080 | 95 | 29 | 5 | | | | | | 3 | 2 | | 1 | 1 | 1 | 1 | | | | | | | | 1 | |
| 403 | Stag | 499156 | 5522360 | 50 | 13 | 5 | | | | | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | 1 | 1 | |
| 404 | Stag | 499176 | 6622365 | 60 | 19 | 9 | | 1 | | | | 3 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | | | 1 | 1 | |
| 405 | Stag | 499169 | 6622420 | 75 | 11 | 3 | | 1 | | | 1 | | | 1 | 1 | | | | 1 | | | | | | 1 | 1 | |
| 406 | White Mahogany | 498154 | 6626751 | 205 | 26 | 13 | | | | | | 7 | 4 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | 1 | 1 | Significant habitat tree in immediate area |
| 407 | White Mahogany | 498175 | 6626592 | 125 | 25 | 9 | | | | 1 | 1 | 3 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | 1 | 1 | |

| HBT Ref No. | Species | Easting | Northing | DBH (cm) | ~Tree Height (m) | No. Func. Holl. | Trunk Butt | Trunk Fissures | Trunk Small | Trunk Medium | Trunk Large | Limb Small | Limb Medium | Limb Large | SF | MB | SG | LG | Po | Pa | Co | SO | LFO | EB | LM | AH | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | WGS84 | WGS84 | | | | | | <5cm | 5-15 cm | >15 cm | <5cm | 5-15 cm | >15 cm | | | | | | | | | | | | | |
| 408 | Tallowwood | 498134 | 6626546 | 115 | 25 | 7 | | | | | | 3 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | 1 | 1 | |
| 409 | Pink Bloodwood | 498105 | 6626487 | 90 | 21 | 5 | | | | | 1 | 2 | 2 | | 1 | 1 | 1 | 1 | 1 | 1 | | | | | 1 | 1 | |
| 410 | Tallowwood | 498142 | 6626618 | 100 | 21 | 3 | | | | | | 2 | 1 | | | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 411 | White Mahogany | 498134 | 6626657 | 85 | 20 | 3 | | | | | | 2 | 1 | | | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 412 | Pink Bloodwood | 498130 | 6626667 | 105 | 21 | 1 | | | | | 1 | | | | 1 | | | | 1 | | | | | | 1 | 1 | |
| 413 | Pink Bloodwood | 498198 | 6626653 | 105 | 22 | 6 | | | | | | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | 1 | 1 | |
| 414 | Pink Bloodwood | 498222 | 6626803 | 110 | 25 | 16 | | | 1 | 1 | | 7 | 5 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | 1 | 1 | |
| 415 | White Mahogany | 498344 | 6626957 | 110 | 26 | 4 | | | | | | 2 | 2 | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | 3 m north of station 47 with blue tape |
| 416 | Stag | 498477 | 6627076 | 135 | 20 | 2 | | 1 | | | 1 | | | | 1 | 1 | | | 1 | | | | | | 1 | 1 | |
| 417 | Flooded Gum | 498476 | 6627175 | 215 | 30 | 18 | | | | | | 8 | 6 | 4 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | 1 | 1 | |
| 418 | Flooded Gum | 498475 | 6627312 | 140 | 24 | 3 | | | | | | 1 | 2 | | | 1 | 1 | 1 | 1 | | | | | | | 1 | |
| 419 | Swamp Mahogany | 497723 | 6624879 | 95 | 14 | 8 | | | 3 | 2 | | 2 | 1 | | 1 | 1 | | | 1 | 1 | | 1 | | | | 1 | north side of dam in open paddock |
| 420 | stag | 499086 | 6622518 | 115 | 14 | 4 | | 1 | 2 | | 1 | | | | 1 | 1 | | | 1 | | | | | | 1 | 1 | 2 m inside eastern road corridor boundary ring barked this stag and next 12 as stand improvement (i.e. forestry technique) |
| 421 | Stag | 499095 | 6622515 | 75 | 22 | 5 | | 1 | | | | 3 | 1 | | 1 | 1 | 1 | 1 | | | | | | | | 1 | |
| 422 | stag | 499111 | 6622434 | 55 | 8 | 2 | | 1 | | | 1 | | | | | | | | 1 | | | | | | 1 | 1 | |
| 423 | stag | 499061 | 6622455 | 90 | 19 | 2 | | 1 | | | 1 | | | | 1 | | | | 1 | | | | | | 1 | | Turpentine |
| 424 | Stag | 499031 | 6622454 | 50 | 10 | 2 | | | | | | 2 | | | 1 | | 1 | | | | | | | | | 1 | |
| 425 | Stag | 499031 | 6622453 | 60 | 12 | 4 | | 1 | | | | 2 | 1 | | 1 | 1 | 1 | 1 | | | | | | | | 1 | |
| 426 | Stag | 498853 | 6622659 | 45 | 7 | 2 | | 1 | | | 1 | | | | 1 | | | | 1 | | | | | | 1 | | |
| 427 | Stag | 498496 | 6622832 | 80 | 18 | 8 | 1 | 1 | | | | 4 | 2 | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 428 | stag | 498549 | 6622892 | 100 | 18 | 3 | | 1 | | 1 | 1 | | | | 1 | 1 | | | 1 | | | | | | | 1 | |
| 431 | Coastal Blackbutt | 498395 | 6622987 | 85 | 21 | 4 | | | | | | 2 | 2 | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | Southern bank of Martell's Road |
| 433 | Coastal Blackbutt | 498356 | 6623603 | 100 | 24 | 4 | | | | | | 2 | 2 | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 434 | Coastal Blackbutt | 498233 | 6623628 | 105 | 21 | 4 | | | | | | 2 | 2 | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 435 | Pink Bloodwood | 498225 | 6623759 | 65 | 18 | 7 | | | | | | 4 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | 1 | 1 | |
| 436 | Red Mahogany | 498195 | 6623826 | 120 | 21 | 8 | | | | | | 3 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | 1 | 1 | |
| 437 | Swamp Mahogany | 498178 | 6623842 | 50 | 14 | 2 | | | | | | | 2 | | 1 | | 1 | 1 | | | | | | | | 1 | |
| 438 | Swamp Mahogany | 498176 | 6623851 | 55 | 15 | 3 | | | | 1 | | 1 | 1 | | 1 | | 1 | 1 | 1 | | | | | | 1 | 1 | |
| 439 | Coastal Blackbutt | 498024 | 6624132 | 90 | 18 | 4 | | | 1 | | | 2 | 1 | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 440 | Stag | 497662 | 6625186 | | | 3 | | | | | | 2 | 1 | | 1 | 1 | 1 | | | | | | | | | 1 | |
| 441 | Grey Ironbark | 497757 | 6625203 | 115 | 16 | 5 | | | | | | 3 | 2 | | 1 | 1 | 1 | | | | | | | | | 1 | |
| 442 | Tallowwood | 497899 | 6625902 | 65 | 19 | 5 | | | | | | 2 | 3 | | 1 | 1 | 1 | 1 | | | | | | | | 1 | |
| 443 | Tallowwood | 497897 | 6625918 | 105 | 19 | 6 | | | 2 | | 1 | 2 | 1 | | 1 | 1 | 1 | 1 | 1 | | | | | | | 1 | |
| 444 | White Mahogany | 497829 | 6625958 | 90 | 21 | 5 | | | | | | 4 | 1 | | 1 | 1 | 1 | 1 | | | | | | | | 1 | |
| 445 | Stag | 497797 | 6625894 | 80 | 12 | 2 | | | | | 1 | | | 1 | 1 | | | | 1 | | | | | | 1 | | |
| 446 | Stag | 497813 | 6625864 | 65 | 10 | 1 | | | | | 1 | | | | 1 | | | | 1 | | | | | | 1 | | |
| 447 | Stag | 497788 | 6625826 | 60 | 11 | 1 | | | | | 1 | | | | 1 | | | | 1 | | | | | | 1 | | |
| 448 | Stag | 497784 | 6625831 | 40 | 16 | 2 | | | | | 1 | 1 | | | 1 | 1 | | | 1 | | | | | | 1 | | |
| 449 | White Mahogany | 497905 | 6625781 | 100 | 17 | 1 | | | | | 1 | | | | | | | | 1 | | | | | | 1 | | |
| 450 | White Mahogany | 497932 | 6625791 | 110 | 18 | 4 | | | | | | 3 | 1 | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 451 | Grey Ironbark | 498028 | 6626228 | 145 | 27 | 8 | | | | | 1 | 4 | 3 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | 1 | 1 | |
| 452 | Pink Bloodwood | 498041 | 6626312 | 130 | 23 | 5 | | | | | | 2 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | 1 | 1 | |
| 453 | Pink Bloodwood | 498112 | 6626300 | 150 | 28 | 10 | | | | | | 4 | 3 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | 1 | 1 | |

| HBT Ref No. | Species | Easting | Northing | DBH (cm) | ~Tree Height (m) | No. Func. Holl. | Trunk Butt | Trunk Fissures | Trunk Small | Trunk Medium | Trunk Large | Limb Small | Limb Medium | Limb Large | SF | MB | SG | LG | Po | Pa | Co | SO | LFO | EB | LM | AH | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | WGS84 | WGS84 | | | | | | <5cm | 5-15 cm | >15 cm | <5cm | 5-15 cm | >15 cm | | | | | | | | | | | | | |
| 455 | Turpentine | 498104 | 6626361 | 95 | 19 | 5 | | | 2 | 1 | | 1 | 1 | | 1 | | 1 | 1 | 1 | | | | | | 1 | 1 | |
| 456 | Stag | 498414 | 6627052 | 85 | 18 | 3 | | | 1 | 1 | | 1 | | | 1 | 1 | | | | | | | | | | 1 | |
| 457 | Pink Bloodwood | 498408 | 6627076 | 105 | 25 | 4 | | | | | | 3 | 1 | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 458 | Stag | 498572 | 6627321 | 50 | 8 | 1 | | | | 1 | | | | | 1 | 1 | | | 1 | | | | | | 1 | 1 | |
| 459 | Swamp Mahogany | 498633 | 6627386 | 105 | 22 | 6 | | | | | | 4 | 2 | | 1 | 1 | 1 | 1 | | | | | | | | 1 | |
| 460 | Flooded Gum | 498641 | 6627441 | 115 | 24 | 7 | | | 4 | | | 2 | 1 | | 1 | | 1 | 1 | | | | | | | | 1 | |
| 461 | White Mahogany | 498645 | 6627469 | 105 | 30 | 4 | | | | | | 3 | 1 | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | in gully on creek line |
| 462 | Grey Ironbark | 498800 | 6627554 | 190 | 35 | 6 | | | | | | 4 | 2 | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 463 | Stag | 498781 | 6627571 | 45 | 11 | 2 | | 1 | | | 1 | | | | 1 | | | | 1 | | | | | | 1 | 1 | |
| 464 | Pink Bloodwood | 498871 | 6627639 | 105 | 25 | 6 | | | | | | 4 | 2 | | 1 | 1 | 1 | 1 | 1 | | | | | | | 1 | |
| 465 | Pink Bloodwood | 498871 | 6627633 | 115 | 27 | 8 | | | | | | 5 | 3 | | 1 | 1 | 1 | 1 | 1 | | | | | | | 1 | |
| 466 | Stag | 498905 | 6627654 | 80 | 20 | 11 | | 1 | 2 | 2 | 1 | 1 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | 1 | 1 | definite use by fauna |
| 467 | Stag | 498913 | 6627739 | 75 | 13 | 2 | | | | | 1 | 1 | | | 1 | 1 | 1 | 1 | 1 | | | | | | | 1 | |
| 468 | Stag | 498969 | 6627751 | 65 | 15 | 7 | | | | | 1 | 1 | 2 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | 1 | 1 | |
| 469 | Stag | 499013 | 6627780 | 65 | 20 | 11 | | 1 | 2 | 1 | 1 | | 3 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | 1 | 1 | |
| 470 | Swamp Mahogany | 499561 | 6628389 | 140 | 18 | 7 | | | | | | 4 | 3 | | | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 471 | Pink Bloodwood | 499038 | 6627772 | 105 | 24 | 4 | | | | | | 3 | 1 | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 472 | Stag | 499070 | 6627776 | 70 | 19 | 10 | | | 1 | | 1 | 5 | 3 | | 1 | 1 | 1 | 1 | | 1 | | | | | 1 | 1 | |
| 473 | Turpentine | 499084 | 6627817 | 90 | 19 | 2 | | | | | | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | | | | | 1 | 1 | |
| 474 | Stag | 499118 | 6627888 | 65 | 14 | 2 | | | | | | | 1 | 1 | 1 | | | | 1 | | | | | | 1 | 1 | |
| 475 | Coastal Blackbutt | 499101 | 6627938 | 105 | 22 | 3 | | | | | | 3 | | | | 1 | 1 | | | | | | | | | 1 | |
| 476 | Coastal Blackbutt | 499101 | 6627939 | 90 | 21 | 2 | | | | | | 2 | | | | 1 | 1 | | | | | | | | | 1 | |
| 478 | Coastal Blackbutt | 499194 | 6627965 | 105 | 22 | 2 | | | 1 | | | 1 | | | | 1 | 1 | | | | | | | | | 1 | |
| 480 | Stag | 499012 | 6627835 | 125 | 32 | 7 | | | | | | 2 | 2 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | 1 | 1 | |
| 481 | Stag | 498875 | 6627729 | 35 | 7 | 1 | | | | | 1 | | | | | | | | 1 | | | | | | 1 | | |
| 491 | White Mahogany | 492522 | 6600188 | 130 | 15 | 1 | | | | 1 | | | | | 1 | | | | 1 | 1 | | | | | | 1 | Eastern Rosella using tree hollow |
| 492 | Broad-leaved Paperbark | 493396 | 6601717 | 200 | 11 | 5 | | | 3 | 2 | | | | | | 1 | | | | 1 | | | | | | 1 | |
| 493 | Broad-leaved Paperbark | 493392 | 6601720 | 40 | 11 | 3 | | | 2 | 1 | | | | | | 1 | | | | 1 | | | | | | 1 | |
| 494 | Broad-leaved Paperbark | 493394 | 6601727 | 55 | 10 | 2 | | | 2 | | | | | | | 1 | | | | | | | | | | 1 | |
| 495 | Grey Mangrove | 493782 | 6602801 | 75 | 7 | 4 | | | 2 | | | 2 | | | | 1 | | | | | | | | | | 1 | |
| 496 | Broad-leaved Paperbark | 494067 | 6602935 | 130 | 7 | 4 | | 1 | 2 | 1 | | | | | | 1 | | | | 1 | | | | | | 1 | |
| 497 | Broad-leaved Paperbark | 494048 | 6602890 | 65 | 7 | 5 | | | 3 | 1 | 1 | | | | | 1 | | | 1 | 1 | | | | | | 1 | |
| 498 | Broad-leaved Paperbark | 494044 | 6602901 | 125 | 7 | 1 | | | | | 1 | | | | | | | | 1 | | | | | | | 1 | Common Ringtail Possum using |
| 499 | Broad-leaved Paperbark | 494005 | 6602914 | 220 | 9 | 5 | | | 3 | 2 | | | | | | 1 | | | | 1 | | | | | | 1 | |
| 500 | Broad-leaved Paperbark | 493993 | 6602976 | 40 | 8 | 2 | | | | 1 | | | | 1 | | | | | | | | | | | | | Eastern Rosella using large limb hollow |
| 501 | White Mahogany | 494353 | 6604053 | 90 | 16 | 6 | | | | | | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | 1 | 1 | |
| 502 | White Mahogany | 494360 | 6604059 | 65 | 15 | 3 | | | | | | 3 | | | 1 | 1 | | | | | | | | | | 1 | |
| 503 | White Mahogany | 494370 | 6604038 | 70 | 16 | 3 | | | | | | 3 | | | 1 | 1 | | | | | | | | | | 1 | |
| 504 | Small-fruited Grey Gum | 494370 | 6604038 | 45 | 16 | 3 | | | | | | 3 | | | 1 | 1 | | | | | | | | | | 1 | |
| 505 | White Mahogany | 494347 | 6604049 | 90 | 16 | 6 | | | | 1 | | 2 | 3 | | 1 | 1 | 1 | 1 | | 1 | | | | | | | Medium trunk hollow currently being used as extensive wear marks |
| 506 | White Mahogany | 494348 | 6604045 | 35 | 9 | 3 | | | 2 | | | | | 1 | 1 | 1 | | | | | | | | | | 1 | |
| 507 | White Mahogany | 494360 | 6604032 | 75 | 18 | 8 | | | | | | 5 | 3 | | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | 1 | |
| 508 | White Mahogany | 494375 | 6604033 | 65 | 19 | 1 | | | 1 | | | | | | | 1 | 1 | | | | | | | | | 1 | |
| 509 | White Mahogany | 494344 | 6604021 | 95 | 19 | 5 | | | | | | 3 | 2 | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | |

| HBT Ref No. | Species | Easting | Northing | DBH (cm) | ~Tree Height (m) | No. Func. Holl. | Trunk Butt | Trunk Fissures | Trunk Small | Trunk Medium | Trunk Large | Limb Small | Limb Medium | Limb Large | SF | MB | SG | LG | Po | Pa | Co | SO | LFO | EB | LM | AH | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | WGS84 | WGS84 | | | | | | <5cm | 5-15 cm | >15 cm | <5cm | 5-15 cm | >15 cm | | | | | | | | | | | | | |
| 510 | White Mahogany | 494344 | 6604022 | 95 | 18 | 9 | | | 1 | 1 | | 3 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | 1 | |
| 511 | White Mahogany | 494331 | 6604020 | 55 | 14 | 3 | | | | | | 2 | 1 | | | 1 | 1 | | | 1 | | | | | | 1 | |
| 512 | White Mahogany | 494326 | 6604003 | 55 | 15 | 2 | | | | | | 2 | | | | 1 | 1 | | | | | | | | | 1 | |
| 513 | White Mahogany | 494326 | 6603948 | 95 | 15 | 3 | | | | | | 3 | | | | 1 | 1 | | | | | | | | | 1 | |
| 514 | Turpentine | 494327 | 6603947 | 30 | 8 | 1 | | | 1 | | | | | | 1 | | | | | | | | | | | 1 | |
| 515 | White Mahogany | 494327 | 6603937 | 95 | 19 | 4 | | | | | | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | 1 | |
| 516 | Turpentine | 494327 | 6603913 | 40 | 9 | 2 | | | | | | 1 | 1 | | 1 | 1 | | | | 1 | | | | | | 1 | |
| 517 | White Mahogany | 494360 | 6604074 | 95 | 16 | 3 | | | | 2 | | 1 | | | 1 | | | | | 1 | | | | | | 1 | |
| 518 | Tallowwood | 494358 | 6604104 | 65 | 18 | 3 | | | | | | 2 | 1 | | 1 | 1 | 1 | | | | | | | | | 1 | |
| 519 | White Mahogany | 494351 | 6604109 | 95 | 16 | 5 | | | | 1 | | 2 | 2 | | | 1 | 1 | 1 | 1 | 1 | | | | | | 1 | |
| 520 | White Mahogany | 494351 | 6604133 | 45 | 13 | 1 | | | | 1 | | | | | | | | 1 | 1 | 1 | | | | | | | Medium trunk hollow show signs of current use |
| 521 | Tallowwood | 494356 | 6604153 | 105 | 23 | 6 | | | | | | 4 | 2 | | | 1 | | 1 | | 1 | | | | | | 1 | |
| 522 | Tallowwood | 494356 | 6604151 | 70 | 21 | 4 | | | | | | 2 | 2 | | | 1 | | 1 | | 1 | | | | | | 1 | |
| 523 | White Mahogany | 494328 | 6604137 | 105 | 20 | 9 | | | | | | 4 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | 1 | |
| 524 | White Mahogany | 494343 | 6604212 | 105 | 18 | 5 | | | | | | 3 | 2 | | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | 1 | |
| 525 | Coastal Blackbutt | 494336 | 6604291 | 130 | 23 | 3 | | | | | | 3 | | | | 1 | 1 | | | | | | | | | 1 | Rainbow Lorikeet using medium trunk |
| 526 | Turpentine | 494345 | 6604238 | 40 | 14 | 3 | | | 1 | 2 | | | | | 1 | | 1 | | | 1 | | | | 1 | | 1 | 8.5 m above ground in trunk hollow nth facing |
| 527 | Turpentine | 494336 | 6604234 | 75 | 15 | 4 | | | 2 | 2 | | | | | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 528 | Coastal Blackbutt | 494379 | 6604823 | 100 | 21 | 4 | | | | | | 3 | 1 | | | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 529 | Coastal Blackbutt | 494376 | 6604808 | 100 | 21 | 3 | | | | | | 3 | | | | 1 | 1 | | | | | | | | | 1 | |
| 530 | Coastal Blackbutt | 494387 | 6604830 | 105 | 19 | 5 | | | | | | 4 | 1 | | | 1 | 1 | 1 | 1 | 1 | | | | | | 1 | |
| 531 | Coastal Blackbutt | 494424 | 6605254 | 95 | 16 | 6 | | | | | | 3 | 3 | | | 1 | 1 | 1 | 1 | 1 | | | | | | 1 | |
| 532 | Stag | 494468 | 6605254 | 45 | 12 | 9 | | 1 | | | | 5 | 3 | | | 1 | 1 | 1 | 1 | 1 | | | | | | 1 | |
| 533 | Coastal Blackbutt | 494427 | 6605290 | 70 | 17 | 3 | | | | | | 2 | 1 | | | 1 | 1 | 1 | 1 | 1 | | | | | | 1 | |
| 534 | Coastal Blackbutt | 494448 | 6605406 | 55 | 15 | 2 | | | | | | 2 | | | | 1 | 1 | | | | | | | | | 1 | |
| 535 | Coastal Blackbutt | 494665 | 6605513 | 90 | 22 | 4 | | | | | | 2 | 2 | | | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 536 | Coastal Blackbutt | 494661 | 6605516 | 105 | 22 | 10 | | | | | | 4 | 5 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | 1 | 1 | |
| 537 | Coastal Blackbutt | 494657 | 6605530 | 120 | 18 | 3 | | | | | | 2 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | 1 | |
| 538 | Coastal Blackbutt | 494653 | 6605567 | 100 | 20 | 5 | | | | | | 3 | 2 | | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | 1 | |
| 539 | Coastal Blackbutt | 494699 | 6605590 | 115 | 21 | 11 | | | 2 | | | 5 | 4 | | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | 1 | |
| 540 | Coastal Blackbutt | 494740 | 6605764 | 115 | 21 | 4 | | | | | 1 | 3 | | | | 1 | 1 | | | | | | | | | 1 | |
| 541 | Coastal Blackbutt | 494758 | 6605835 | 105 | 16 | 4 | | | | | | 3 | 1 | | | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 542 | Coastal Blackbutt | 494757 | 6605788 | 135 | 21 | 4 | | | | | | 2 | 2 | | | 1 | 1 | 1 | | 1 | | | | | | 1 | |
| 543 | Coastal Blackbutt | 494898 | 6606055 | 160 | 22 | 17 | 1 | 1 | 1 | | | 7 | 5 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | | | 1 | 1 | |
| 544 | Coastal Blackbutt | 494859 | 6605960 | 80 | 17 | 4 | | | | | | 3 | 1 | | | 1 | 1 | | | 1 | | | | | | 1 | |
| 545 | Coastal Blackbutt | 494851 | 6605965 | 85 | 19 | 4 | | | | | | 3 | 1 | | | 1 | 1 | | | 1 | | | | | | 1 | |
| 546 | Coastal Blackbutt | 494776 | 6605802 | 85 | 17 | 5 | | | | | | 4 | 1 | | | 1 | 1 | | | 1 | | | | | | 1 | |
| 547 | Coastal Blackbutt | 494758 | 6605774 | 90 | 17 | 2 | | | | | | 2 | | | | 1 | 1 | | | | | | | | | 1 | |
| 548 | Coastal Blackbutt | 494810 | 6605714 | 125 | 24 | 16 | | | | | | 8 | 6 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | | | 1 | 1 | |
| 549 | Coastal Blackbutt | 494817 | 6605767 | 105 | 20 | 4 | | | | | | 3 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | 1 | |
| 550 | Coastal Blackbutt | 494831 | 6605835 | 105 | 26 | 8 | | | | | | 5 | 3 | | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | 1 | |
| 551 | Coastal Blackbutt | 494832 | 6605844 | 280 | 28 | 26 | | | | | | 15 | 7 | 4 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | 1 | 1 | Near to the construction footprint. All efforts should be made to retain this tree as it contains the bulk of the immediate tree hollow resources |