PENDLE HILL STATION PRECINCT ACCESSIBILITY UPGRADE
Flora and Fauna Assessment

FINAL REPORT

Prepared for Transport for NSW

5 December 2014

Biosis offices

AUSTRALIAN CAPITAL TERRITORY

Canberra

Floor 1, Unit 3, 38 Essington Street
Mitchell ACT 2911

Phone: (02) 6102 1200
Fax: (03) 9646 9242
Email: canberra@biosis.com.au

NEW SOUTH WALES

Newcastle

39 Platt Street
Waratah NSW 2298

Phone: (02) 4968 4901
Fax: (03) 9646 9242
Email: newcastle@biosis.com.au

Sydney

Unit 14, 17-27 Power Avenue
Alexandria NSW 2015

Phone: (02) 9101 8700
Fax: (02) 9690 2577
Email: sydney@biosis.com.au

Wollongong

8 Tate Street
Wollongong NSW 2500

Phone: (02) 4201 1090
Fax: (02) 4229 5500
Email: wollongong@biosis.com.au

QUEENSLAND

Brisbane

Suite 4 First Floor, 72 Wickham Street
Fortitude Valley QLD 4006

Phone: (07) 3831 7400
Fax: (07) 3831 7411
Email: brisbane@biosis.com.au

VICTORIA

Ballarat

506 Macarthur Street
Ballarat VIC 3350

Phone: (03) 5304 4250
Fax: (03) 5331 7033
Email: ballarat@biosis.com.au

Melbourne (Head Office)

38 Bertie Street
Port Melbourne VIC 3207

Phone: (03) 8686 4800
Fax: (03) 9646 9242
Email: melbourne@biosis.com.au

Wangaratta

16 Templeton Street
Wangaratta VIC 3677

Phone: (03) 5721 9453
Fax: (03) 5721 9454
Email: wangaratta@biosis.com.au

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Prepared by:	Jane Murray Brian Wilson
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Summary

Biosis Pty Ltd was commissioned by Transport for NSW (TfNSW) to undertake a flora and fauna assessment of the area around the Pendle Hill Railway Station potentially impacted by the proposed Pendle Hill Railway Station Easy Access Upgrade (the Proposal).

Ecological values

Narrow strips of vegetation are present, located mostly along both sides of the fence lines on either side of the rail corridor. These areas were found to mostly comprise planted vegetation or environmental weeds south of the rail corridor. North of the rail corridor, inside the RailCorp fence and west of the existing ramp, an area containing several indigenous native plants and trees is likely to be a small remnant of the natural vegetation of the local area. All areas were highly influenced by edge effects, particularly environmental weeds.

Built structures including buildings, stairs, ramps and concourses are present. These were found to provide little habitat for birds, micro-bats or other native fauna.

No trees with hollows were found within the study area but, when flowering, the large Forest Red Gums *Eucalyptus tereticornis* on the north side of the rail corridor and the large Tallowwoods *Eucalyptus microcorys* on the south side of the rail corridor, may provide a small amount of potential foraging habitat for nectivorous birds and possibly the threatened species Little Lorikeet *Glossopsitta pusilla* and Grey-headed Flying-fox *Pteropus poliocephalus.*

There is no potential habitat for any of the 16 threatened flora species known or predicted to occur within 5 kilometres of the study area and the absence of these species was confirmed from the site inspection.

Only a very small amount of potential habitat (flowering eucalypts) for four of the 29 threatened or migratory fauna species, known or predicted to occur within 5 kilometres of the study area, is present.

There will be a minor loss of potential foraging habitat for the Grey-headed Flying-fox and Little Lorikeet through the removal of the large Tallowwoods adjacent to the existing ramp on the south side of the rail corridor.

It is considered that the Pendle Hill Railway Station Accessibility Upgrade proposal is unlikely to significantly impact any threatened species or ecological communities (biota).

There are 12 large trees adjacent to the existing ramp on the south side of the rail corridor to be removed. These comprise three large She-oaks and nine large Tallowwoods of 30-40 cm DBH.

These trees, plus two large Pepper Trees located at the foot of existing ramp on the south side of the rail corridor and an exotic tree located near the proposed bus shelter, are proposed for removal and meet the definition of a 'medium tree' in the TfNSW Offset Strategy and therefore do qualify for offsetting.

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Government legislation and policy

An assessment of the proposal against key biodiversity legislation and policy is provided and summarised below.

Legislation / Policy	Relevant ecological feature on site	Permit / Approval required	Notes
Environment Protection and Biodiversity Conservation Act (Cwlth) 1999	Potential for threatened flora or fauna species or Threatened ecological communities within the study area.	None	Inspection of study area found a small remnant of native vegetation that is likely to be a threatened ecological community. No threatened flora or fauna species or listed migratory species was found within the study area. A small amount of potential foraging habitat for the threatened Grey-headed Flying-fox (two large Forest Red Gums and nine large Tallowwoods) is present within the study area. It is proposed to remove these nine large Tallowwoods but based on the small loss of potential habitat involved impacts will not be significant While, the native vegetation area containing the Forest Red Gums does not appear to be impacted by the proposal, protection during the construction and operation phases of the proposal will be required. Since the primary root zone may extend outside the RailCorp fence, should any excavation expose large roots then the advice of an arborist should be sought regarding the appropriate measures to ensure the health of the tree is maintained.

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Legislation / Policy	Relevant ecological feature on site	Permit / Approval required	Notes
	Potential for listed Migratory species within the study area.	None	None likely to occur
Threatened Species Conservation Act (NSW) 1995	Potential for threatened flora or fauna species or Threatened Ecological Communities within the study area.	None	Inspection of study area found a small remnant of native vegetation that is likely to be a threatened ecological community. No threatened flora or fauna species was found within the study area. A small amount of potential foraging habitat for the threatened Grey-headed Flying-fox and Little Lorikeet (two large Forest Red Gums and nine large Tallowwoods) is present within the study area. The native vegetation area is proposed for retention and protection during the construction and operation phases of the proposal. The removal of the nine large Tallowwoods providing a small amount of potential foraging habitat for two threatened fauna species is unlikely to have a significant impact on either fauna species.
Fisheries Management Act (NSW) 1994	None	None	No aquatic habitat present
Environmental Planning & Assessment Act (NSW) 1979	If potential habitat for threatened flora or fauna species or Threatened Ecological Communities is present within the study area and potentially impacted, then Assessment of	None	A small area of native vegetation inside the RailCorp fence on the north side of the rail corridor is likely to be a threatened ecological community. Assessment of Significance (7-part test)

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Legislation / Policy	Relevant ecological feature on site	Permit / Approval required	Notes
	Significance/7-part test of Section 5A of the Act is required.		not required due to the fact that this area is proposed for retention and protection during the construction and operation phases of the proposal. The removal of the nine large Tallowwoods providing a small amount of potential foraging habitat for two threatened fauna species is unlikely to have a significant impact on either fauna species.
National Parks and Wildlife Act (NSW) 1974	None	None	N.A.
Noxious Weeds Act (NSW) 1993	Noxious weeds	No formal approval required	Four Noxious Weed species were identified within the study area (Green Cestrum, Large-leaved Privet, Purple Lantana and Asparagus fern). Comply with control requirements of each class of noxious weed encountered.

Note: Guidance provided in this report does not constitute legal advice.

Recommendations

The primary measure to minimise impacts on ecological values from works within any site is to minimise removal of any native vegetation and habitat. Within the Pendle Hill Railway Station study area, a small remnant native vegetation community is present, but no critical habitat for threatened species is present.

The two large Forest Red Gums plus a few small saplings of this species and other plants on the northern side of the rail corridor are likely to be a remnant of the native vegetation of the local area. The trees in this area also provide a small amount of potential foraging habitat for several fauna species including two threatened species.

The planted row of Tallowwood trees on the south side of the rail corridor may also provide a small amount of foraging habitat for nectivorous fauna including two threatened species.

The Pendle Hill Railway Station Accessibility Upgrade proposal appears to include the retention of the significant vegetation on the northern side.

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It is recommended that the area of native vegetation on the north side of the rail corridor, be protected from indirect impacts during the construction and operation stages of the proposed works. This could be achieved via the installation of a temporary fence during construction and later a permanent fence.

Any excavation close to the two large Forest Red Gums may result in some root damage. It is recommended that if any roots are encountered during the proposed works, a qualified arborist be engaged to advise on the best way to minimise risks to the long-term survival of the trees.

The proposal also appears to include the removal of the nine large Tallowwoods, three large She-oaks and two large Pepper Trees and a large exotic tree near the proposed bus shelter on the southern side of the rail corridor. The removal of these trees should be offset in accordance with the TfNSW Vegetation Offset Guide.

While the nine large Tallowwood trees on the south side of the rail corridor may provide a small amount of potential foraging habitat for birds, they are unsuitable plantings for this location due to their large size. They are already conflicting with overhead power lines and their roots are likely to damage adjacent paving over time.

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1. Introduction

1.1 Project background

Biosis Pty Ltd was commissioned by TfNSW to undertake a flora and fauna impact assessment as part of the Review of Environmental Factors (REF) for the Proposal. The purpose of the study is to assess and report on the impacts to the environment and provide discussion of the best strategies to mitigate any identified impacts. While it is assumed that the trees identified on drawings provided by TfNSW as trees likely to be removed will be impacted, some trees may be retained, pending final design.

1.2 Proposed Accessibility Upgrade Works

The upgrade works at Pendle Hill Railway Station includes the following indicative key scope items:

- Removal of the retail kiosk, ramps, and stairs and [partial removal of the footbridge, subject to the conditions of the planning approval.
- Construction of a new suspended concourse, station operations area and footbridge including enclosed accessible walkways connecting lifts on either side of the station.
- Four new lifts:
    - One at each station entrance
    - One to Platform 1/2
    - One to Platform 3/4

- New platform stairs and canopies
- New street entry stairs and canopies
- Provision of a dedicated electrical/switch room below the new station operation area accessible from the Joyce Street entry.
- Provision of a dedicated Communications Equipment Rom (CER) below the new Station Operation Area (SOA) accessible from Joyce street including the relocation and/or upgrading of communication equipment as required. The new CER is required to house the communication racks and equipment required for (but not limited to) CCTV, PA, SPI Ticketing and station LAN services.
- Provision of a new Station Operations Area (SOA) at concourse level to include (as a minimum) a booking office, count room, station manager area, staff meal room, staff locker room, staff toilet, and a minimum of one (1) family accessible toilet.
- Diversion, relocation, upgrading or replacement of existing utilities (including containment) to accommodate new and upgraded infrastructure and rail systems.
- Upgrade seating areas on platforms with weather protection including canopies and wind barriers.
- Reconfiguration to sections of Joyce Street including;
    - relocation of existing disabled parking.
    - relocate the existing taxi stand (including new standing and shelter as required).
    - extended bus stop and provision of shelter and seating.
    - new kiss and ride area including provision of shelter.
    - removal of 1P parking restriction to provide ten (10) additional commuter parking spaces.

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- new kerb lines and road adjustments (including asphalting, line marking, pedestrian crossing and drainage as required).
- footpath adjustments and extensions as required.
- street and public lighting as required.
- new bike racks and shelters.
- all associated temporary works including pedestrian and traffic management.

- Reconfiguration to sections of Wentworth Avenue including:
  - relocation of existing disabled parking and provision of at least one (1) additional space.
  - relocation and raising of the existing pedestrian crossing closer to the new station entrance.
  - new kiss and ride area incorporating night ride bus stop at the new station entrance.
  - new kerb lines and road adjustments (including asphalting and line marking).
  - footpath adjustments and extensions as required.
  - extended commuter parking with twenty-eight (28) parking spaces (45 degrees).
  - all associated temporary works including pedestrian an traffic management.
  - Modification, diversion and provision of new drainage, landscaping and fencing to impacted areas of the new transport interchange
  - Provision for new/upgraded access pathways including between the station entrances and accessible parking, and kiss and ride areas.

1.3 Scope of assessment

The objectives of this Flora and Fauna Impact Assessment are to:

- Identify any native vegetation communities, threatened species or associated habitat features present within the study area.
- Identify any known or potential habitat for threatened species.
- Review the implications of relevant biodiversity legislation and policy.
- Identify potential impacts on significant ecological communities, species or habitats from the proposed development and provide recommendations to assist with the mitigation of those potential impacts during the construction and operation stages.
- Recommend any further assessments of the site that may be required (such as targeted searches for significant species within inaccessible parts of the study area or considered to be at a low level of detectability at the time of the surveys).

1.4 Location of the study area

The study area is located around Pendle Hill Railway Station, which is situated between Wentworth Avenue and Joyce Street in the residential suburb of Pendle Hill (

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Figure 1). The study area (Figure 2) includes any vegetated areas within the rail corridor and some vegetation on footpaths and isolated trees that could potentially be impacted by the proposal. In most cases the vegetation is restricted to long narrow corridors along fence lines.

The study area is within the:

- Sydney Basin Bioregion
- Holroyd and Parramatta Local Government Areas (LGA).
- The location of the study area is shown in Figure 1 and Figure 2.

For this report:

- 'Local area' is the area within a 5 km radius of the study area
- 'Study area' is the area considered during surveys and impact assessment
- 'Subject site' is the area directly impacted by the proposal.

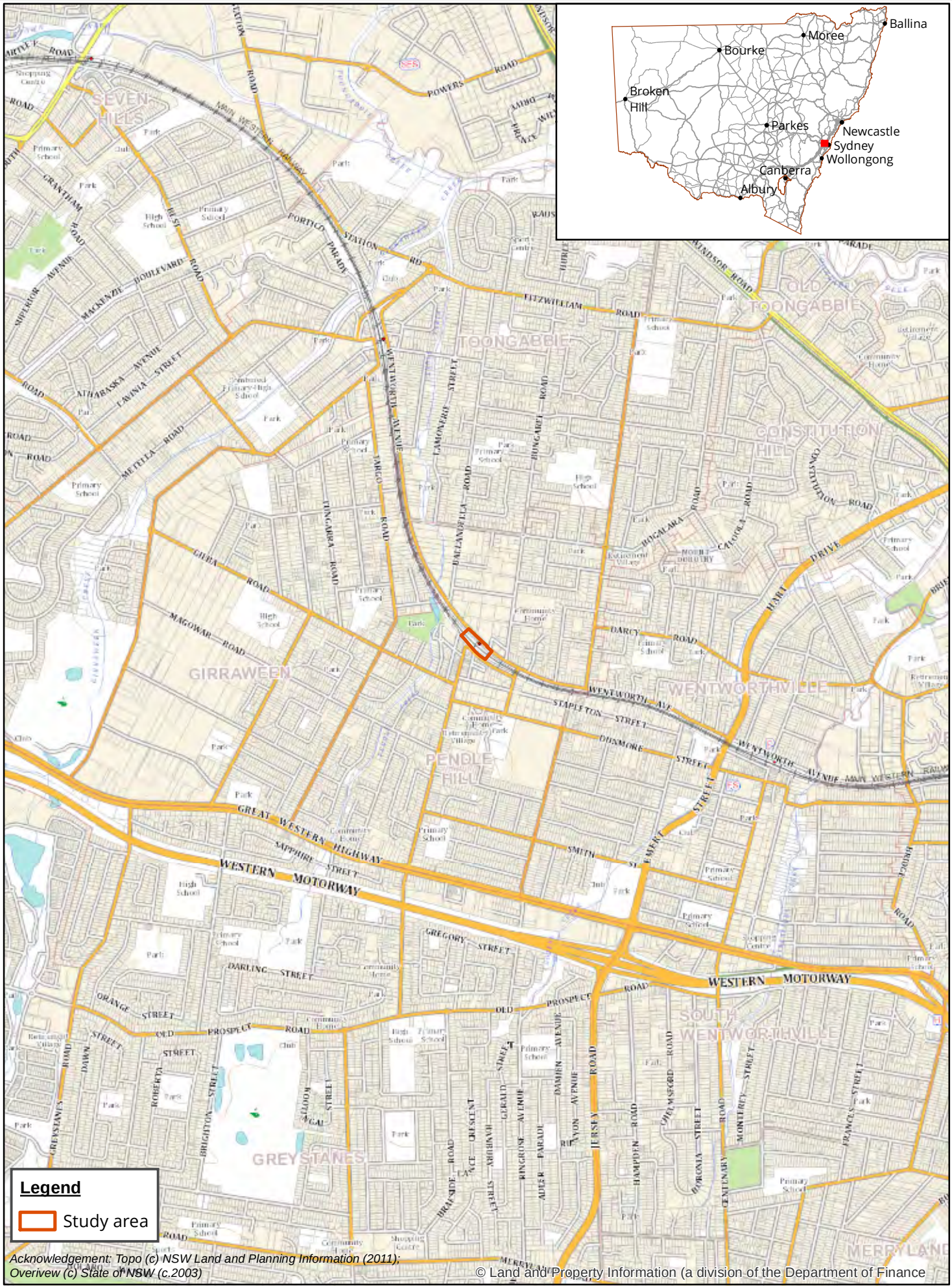

Figure 1: Location of the study area, NSW

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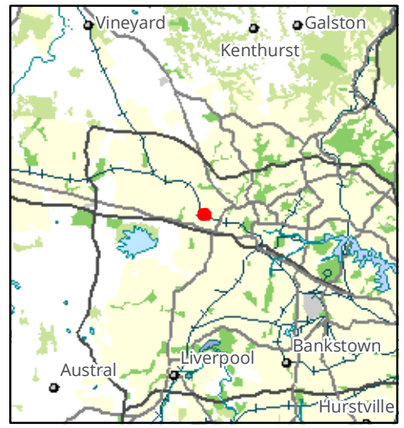
Matter: 19160
Date: 30 October 2014,
Checked by: BW, Drawn by: JMS, Last edited by: jshepherd
Location:P:\19100s\19160\Mapping\

0 250 500 750 1,000
Metres
N
Scale 1:25,000 @ A4, GDA 1994 MGA Zone 56



Legend

Study area

Figure 2: Pendle Hill Station Upgrade Study Area

0 10 20 30 40 50

Metres

Scale: 1:1,000 @ A3

Coordinate System: GDA 1994 MGA Zone 56

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Date: 10 November 2014,
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Location:P:\19100s\19160\Mapping
19160_F2_StudyArea

Acknowledgements: Imagery (c) Nearmap 2014; Basemap (c) NSW LPI

2. Methods

2.1 Literature and database review

In order to provide a context for the study area, information about flora and fauna from within 5 km of the study area (the 'local area') was obtained from relevant public databases. Records from the following databases were collated and reviewed:

- BioNet Atlas of NSW Wildlife, New South Wales, Office of Environment and Heritage (OEH).
- NSW Threatened Species Information (OEH).
- PlantNET (The Royal Botanic Gardens and Domain Trust 2014).
- Protected Matters Search Tool of the Australian Government Department of the Environment (DoE) for matters protected by the Cwlth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).
- Other sources of biodiversity information:
- Relevant vegetation mapping, including, Vegetation Mapping of the Cumberland Plain (NPWS, 2002).

2.2 Site investigation

2.2.1 Flora assessment

The flora assessment for the current report was undertaken on 29 October 2014 by inspecting all vegetated areas within the study area from the closest access point. For vegetation within the rail corridor, the inspection was usually only able to be carried out through a fence or from an adjacent platform.

A list of flora species was compiled for the study area. Records of any threatened flora species will be submitted to OEH for incorporation into the BioNet Atlas of NSW Wildlife.

The general condition of native vegetation was observed as well as the effects of current seasonal conditions. Notes were made on specific issues such as noxious and environmental weed infestations, evidence of management works, roadside impacts such as rubbish dumping and routine maintenance works and the regeneration capacity of the vegetation.

2.2.2 Fauna assessment

The study area was investigated as part of this assessment on 29 October 2014 to determine its values for fauna. These were determined primarily on the basis of the types and qualities of habitat(s) present. All species of fauna opportunistically observed during the assessment were noted. This included direct observation, searching for evidence of fauna presence such as nests, examination of tracks and scats and identifying calls. Particular attention was given to searching for significant species and their habitats. Fauna species were recorded with a view to characterising the values of the site and the investigation was not intended to provide a comprehensive survey of all fauna that has potential to utilise the site over time.

Fauna records will be submitted to OEH for incorporation into the BioNet Atlas of NSW Wildlife.

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2.2.3 Permits and Licences

The flora and fauna assessment was conducted under the terms of Biosis's Scientific Licence issued by the OEH under the *National Parks and Wildlife Act* (SL100758, expiry date 31 March 2015). Fauna survey was conducted under approval 11/355 from the NSW Animal Care and Ethics Committee.

2.3 Limitations

Database searches, and associated conclusions on the likelihood of species to occur within the study area, are reliant upon external data sources and information managed by third parties.

Ecological surveys provide a sampling of flora and fauna at a given time and season. There are a number of reasons why not all species will be detected at a site during survey, such as species dormancy, seasonal conditions, migration and breeding behaviours of some fauna. In many cases these factors do not present a significant limitation to assessing the overall biodiversity values of a site.

The current flora and fauna assessment was conducted in spring, which is an optimal time for survey.

The site inspection was only permissible by TfNSW within the publicly assessable areas around the study area, so some observations had to be made from a distance. It is possible that small plants of some species and small fauna species could have been missed, particularly within densely vegetated areas.

2.4 Legislation and policy

The implications for the proposal were assessed in relation to key biodiversity legislation and policy including:

- Cwlth Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)
- Environmental Planning and Assessment Act 1979 (EP&A Act), including where relevant:
- State Environmental Planning Policy No. 14 – Coastal Wetlands (SEPP 14)
- State Environmental Planning Policy No. 26 – Littoral Rainforests (SEPP 26)
- State Environmental Planning Policy No. 44 – Koala Habitat Protection (SEPP 44)
- Threatened Species Conservation Act 1995 (TSC Act)
- Fisheries Management Act 1994 (FM Act).
- National Parks & Wildlife Act 1974 (NP&W Act).
- Noxious Weeds Act 1993 (NW Act).

2.5 Mapping

Transport for NSW supplied plans for the proposal and potential work area (Pendle Hill Platform Plan Option 2.1 and TAP – 1856 – SITE – 0001 Revision B).

The locations of trees and other ecological features mapped in this report are based on site inspection and aerial photo interpretation.

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3. Results

3.1 Database and document review

Significant species previously recorded within 5 km of the study area are mapped in Figures 3, 4 and 5.

A list of threatened flora species recorded or predicted to occur in the local area, along with an assessment of the likelihood of the species occurring within the Pendle Hill Railway Station study area is provided in Table 6. None of the 16 threatened flora species previously recorded or predicted to occur in the local area, is considered likely to occur within the study area.

A list of the 16 Threatened Ecological Communities recorded or predicted to occur in the local area, is provided in Table 7.

A list of threatened fauna species recorded or predicted to occur in the local area, along with an assessment of the likelihood of the species occurring within the Pendle Hill Railway Station study area is provided in Table 8. Four of the 29 threatened fauna species previously recorded or predicted to occur in the local area, are considered to potentially occur within the study area at least periodically.

A list of migratory fauna species recorded or predicted to occur in the local area, along with an assessment of the likelihood of the species occurring within the Pendle Hill Railway Station study area is provided in Table 9. None of the migratory fauna species is considered likely to occur within the study area.

3.2 Site assessment

The ecological features of the study area are described below and mapped in Figure 6. Photographs of those parts of the study area referred to below are presented in Appendix 3.

3.2.1 Vegetation communities

From the database search, 16 Threatened Ecological Communities have been recorded or are predicted to occur within 5 km of the study area. However, based on regional vegetation mapping of the Cumberland Plain (NPWS, 2002), remnants of four identifiable native vegetation communities comprising three TEC have been mapped near the study area:

- Shale Plains Woodland (*Cumberland Plain Woodland*, Critically Endangered Ecological Community, TSC Act and EPBC Act).
- Shale Hills Woodland (*Cumberland Plain Woodland*, Critically Endangered Ecological Community, TSC Act and EPBC Act).
- Alluvial Woodland (River-flat Eucalypt Forest of the NSW North Coast, Sydney Basin and South-east Corner Bioregions, Endangered Ecological Community, TSC Act).
- Shale-Sandstone Transition Forest – High Sandstone influence (*Shale-Sandstone Transition Forest*, Endangered Ecological Community, TSC Act).

The long history of urbanisation in the Pendle Hill area means that intact remnants of these native vegetation communities are now scarce and they are all listed as Threatened Ecological Communities under NSW and/or Commonwealth legislation. No native vegetation communities are mapped as present within the Pendle Hill Railway Station study area.

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Some individual elements may remain of these vegetation communities even in highly disturbed sites, usually as isolated trees, shrubs or groundcover species or as very small patches of vegetation in relatively inaccessible or undisturbed areas.

Within the Pendle Hill Railway Station study area, most parts exhibit a long history of disturbance and consequently exotic vegetation is common, comprising specific plantings, landscaping treatments, and invasion by environmental weeds and garden plants.

Four flora species, all detected within the same part of the study area, are considered to be elements of one or more local native vegetation communities that are listed as TECs.

The two large Forest Red Gum trees and three smaller Forest Red Gum saplings located on the northern side of the rail corridor, within the RailCorp fence and to the west of the ramp, are a listed species of all three local TECs *(Cumberland Plain Woodland*, *River-flat Eucalypt Forest* and *Shale-Sandstone Transition Forest)* and may be a remnant of one of those vegetation communities in the local area. Further evidence of this is that several isolated nearby trees outside the study area are also Forest Red Gums of a similar large size.

Within this same area, a large Blackthorn bush *Bursaria spinosa*, Hickory Wattle *Acacia implexa* and some False Sarsaparilla *Hardenbergia violacea* plants are also present. Hickory Wattle is a listed species of two of the local TECs *(Cumberland Plain Woodland* and *Shale-Sandstone Transition Forest)*. The Blackthorn and the False Sarsaparilla are both listed species of all three of the local TECs *(Cumberland Plain Woodland*, *River-flat Eucalypt Forest* and *Shale-Sandstone Transition Forest).*

3.2.2 Description of vegetated areas within the study area

The railway station platforms have no trees, shrubs or other vegetation present.

North side of the rail corridor

To the east of the existing ramp along the footpath, some relatively recent paving and landscaping has been carried out comprising a row of small-leaved Lillypillies *Syzygium* sp. about 4 m in height and some Mat-rushes *Lomandra* sp. Narrow bands of vegetation are present within the RailCorp fence. Under the ramp, a row of dead Grevilleas (probably *Grevillea* "Robyn Gordon") and some Purple Lantana *Lantana montevidensis* is present.

To the west of the ramp and within the RailCorp fence, there are two large Forest Red Gum trees about 14 m in height and 40 cm diameter at breast height (DBH) that have had their northern branches lopped due the present of powerlines, Some smaller saplings are present that also appear to of this species. At ground level there are low dead stumps of other large trees. In this area there are a mix of Australian and exotic plant species comprising one large Blackthorn bush around 3 m in height, African Olives *Olea europaea subsp. cuspidata,* Hickory Wattles, Narrow-leaved Cotton Bush *Gomphocarpus fruticosus*, Fleabane *Conyza* sp., Paddy's Lucerne *Sida rhombifolia*, Cobblers Pegs *Bidens pilosa*, False Sarsaparilla, Purple Lantana, etc.

Further west from the Forest Red Gums the vegetation comprises entirely exotic grasses and environmental weeds, such as; Spear Thistle *Cirsium vulgare*, Lambs Tongues *Plantago lanceolata*, Cobblers Pegs, Fleabane, Black Nightshade *Solanum nigrescens*, Flatweed *Hypochoeris radicata*.

South side of the rail corridor

No vegetation is present inside the RailCorp fence west of the base of the ramp but Ivy *Hedera* sp. is growing on the fence. In a derelict garden area at the end of Pendle Way, two large Pepper Trees *Shinus ariera* and Murrayas *Murraya paniculata* are present with Mat-rushes *Lomandra* sp. at ground level.

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Adjacent to the ramp and outside the RailCorp fence, a row of Bottlebrushes *Callistemon* sp. around 4 m in height is present along with a small Camphor Laurel *Cinnamomum camphora*. Further east adjacent to the ramp a row of three large planted She-oaks (around 12 m in height and 30-40 cm DBH are present but due to the overhead power lines they have been lopped. Further east again, a row of nine large Tallowwood *Eucalyptus microcorys* trees have been planted and now reach to about 10 m in height and 30-40 cm DBH. These have also been lopped due to the overhead power lines. A few small shrubs are present under the Tallowwoods comprising a Bottlebrush, a small Camphor Laurel and a Large-leaved Privet *Ligustrum lucidum*. Two smaller She-oaks around 3 m in height are also present here.

Inside the fence a few scattered garden plants and environmental weeds are present such as; Large-leaved Privet, Oleander, a small wattle (possibly Long-leaved Wattle *Acacia longissima*), Paddy's Lucerne, Narrow-leaved Cotton Bush, Paspalum *Paspalum dilatatum*.

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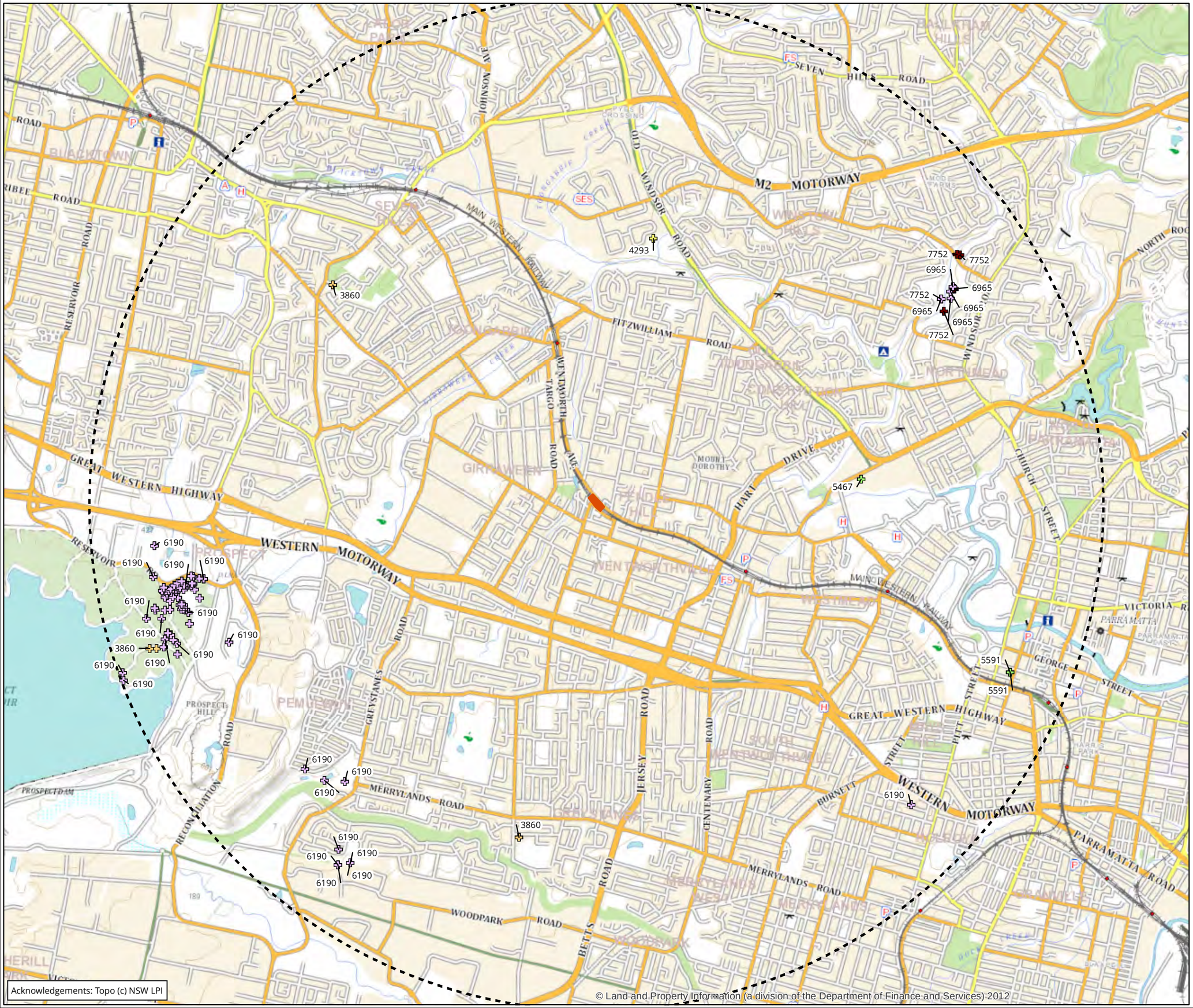

Figure 3: Threatened Flora within 5km of the Study Area

0 350 700 1,050 1,400 1,750

Metres

Scale: 1:35,000 @ A3

Coordinate System: GDA 1994 MGA Zone 55

N

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Date: 30 October 2014,
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Location:P:\19100s\19160\Mapping\19160_F3_ThrFlora_PHill

Species list

Amphibians

3166 - Green and Golden Bell Frog

Birds

0225 - Little Eagle
0238 - Black Falcon
0246 - Barking Owl
0248 - Powerful Owl
0260 - Little Lorikeet
0277 - Superb Parrot
0309 - Swift Parrot
0380 - Scarlet Robin
0549 - Varied Sittella
0603 - Regent Honeyeater

Mammals

1280 - Grey-headed Flying-fox
1329 - Eastern Freetail-bat
1353 - Large-eared Pied Bat
1357 - Southern Myotis
1361 - Greater Broad-nosed Bat
1372 - Eastern False Pipistrelle
1834 - Eastern Bentwing-bat

Molluscs

I006 - Cumberland Plain Land Snail

Figure 4: Threatened Fauna within 5km of the Study Area

0 360 720 1,080 1,440 1,800

Metres
Scale: 1:36,000 @ A3
Coordinate System: GDA 1994 MGA Zone 55

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Matter: 19160
Date: 30 October 2014,
Checked by: BW, Drawn by: JMS, Last edited by: jshepherd
Location:P:\19100s\19160\Mapping
19160_F4_ThrFauna_PHill

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Legend

- Study Area
- Search Area

Migratory fauna

- 0168; Latham's Snipe
- 0226; White-bellied Sea-Eagle
- 0334; White-throated Needletail
- 0335; Fork-tailed Swift
- 0362; Rufous Fantail
- 0373; Black-faced Monarch
- 0603; Regent Honeyeater
- 0977; Cattle Egret
- 8712; Eastern Great Egret

Figure 5: Migratory Fauna within 5km of the Study Area

0 350 700 1,050 1,400 1,750

Metres

Scale: 1:35,000 @ A3

Coordinate System: GDA 1994 MGA Zone 55

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