Appendix C Vegetation Maps

Tile 1: Epping - Vegetation

Tile 2: Cheltenham - Vegetation

Tile 3: Beecroft - Vegetation

Tile 4: Beecroft - Vegetation

Tile 5: Vegetation

Tile 6: Cherrybrook - Vegetation

Tile 7: Vegetation

Tile 8: Castle Hill - Vegetation

Tile 9: Vegetation

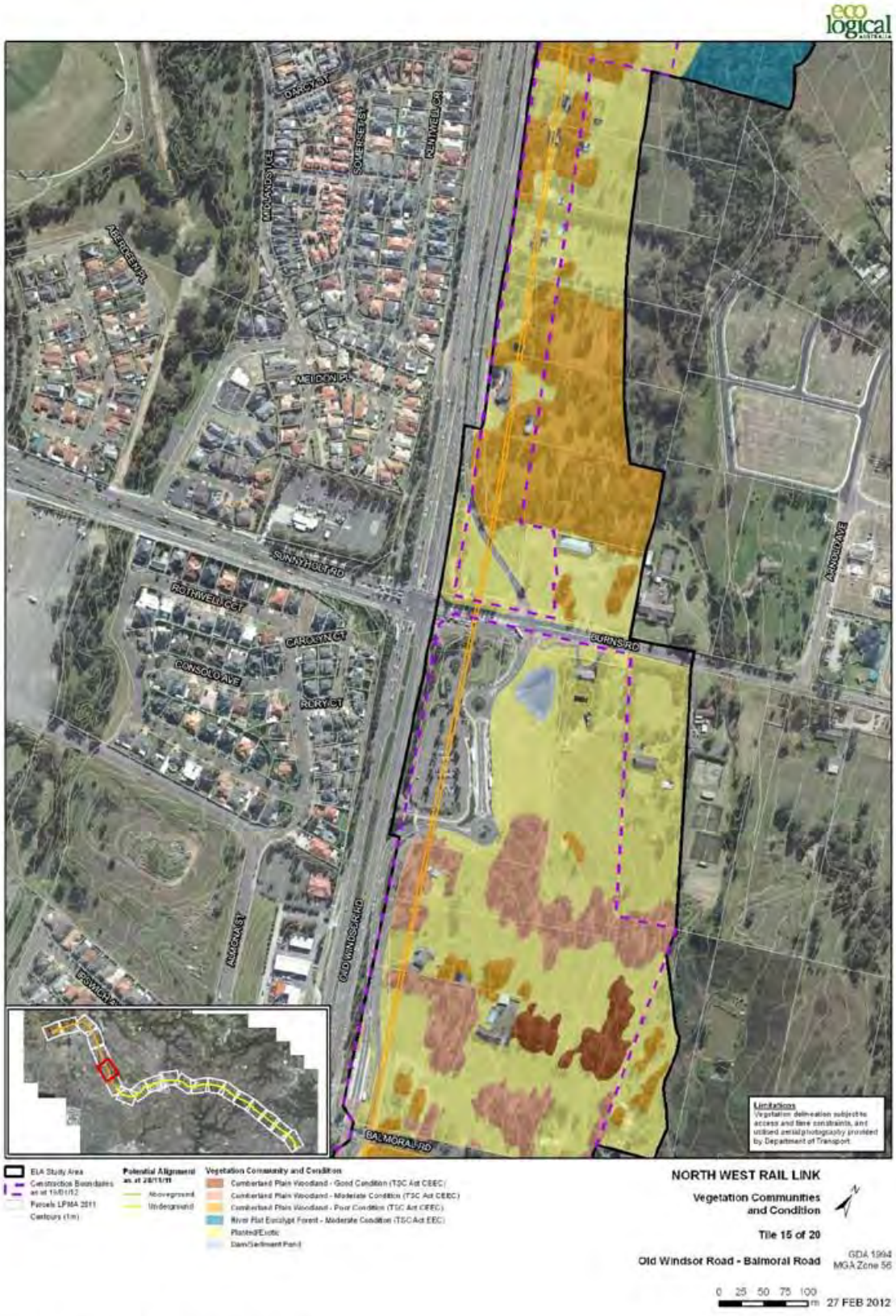
Tile 10: Hills Centre - Vegetation

Tile 11: Vegetation

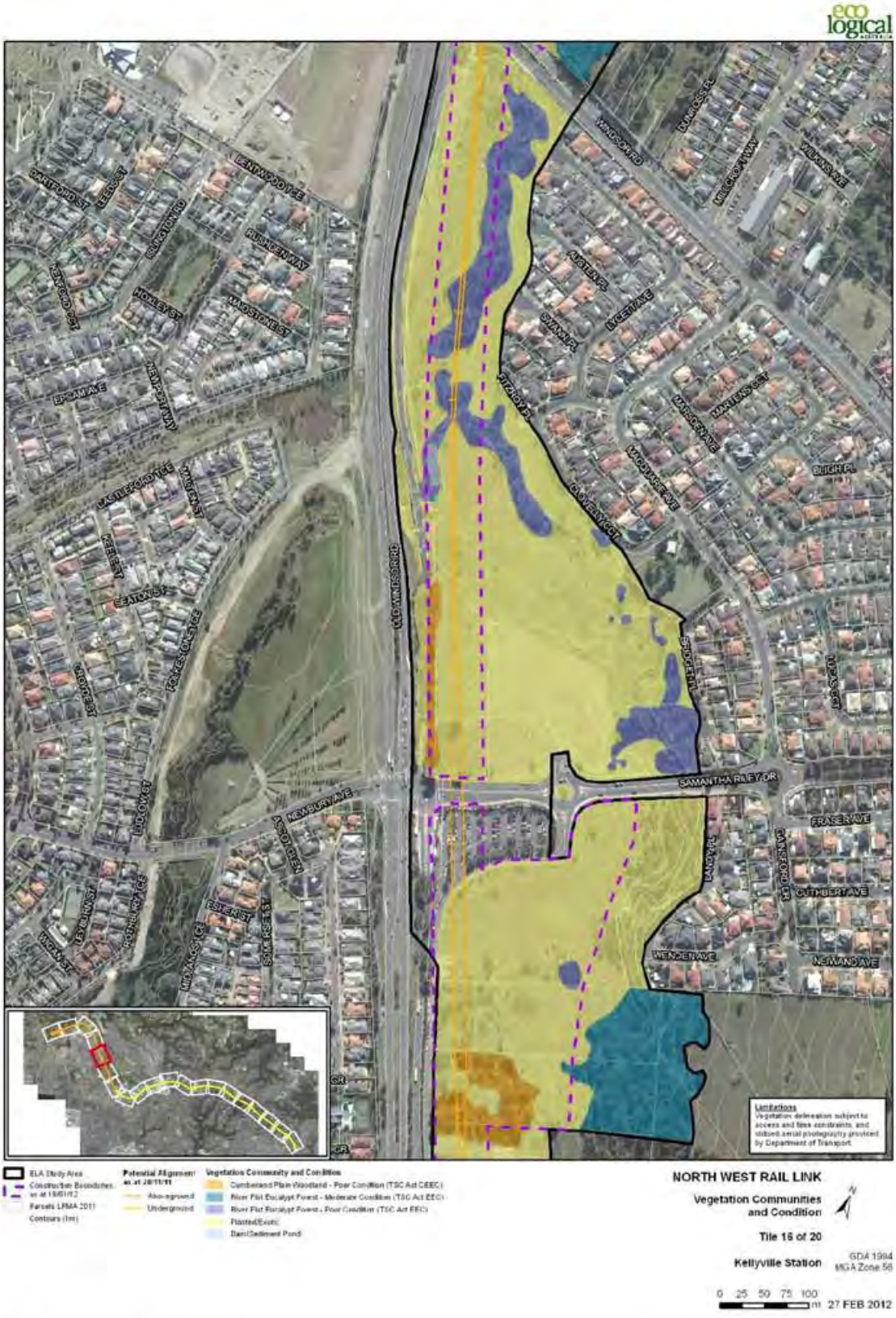
Tile 12: Norwest - Vegetation

Tile 13: Northbridge Avenue - Vegetation

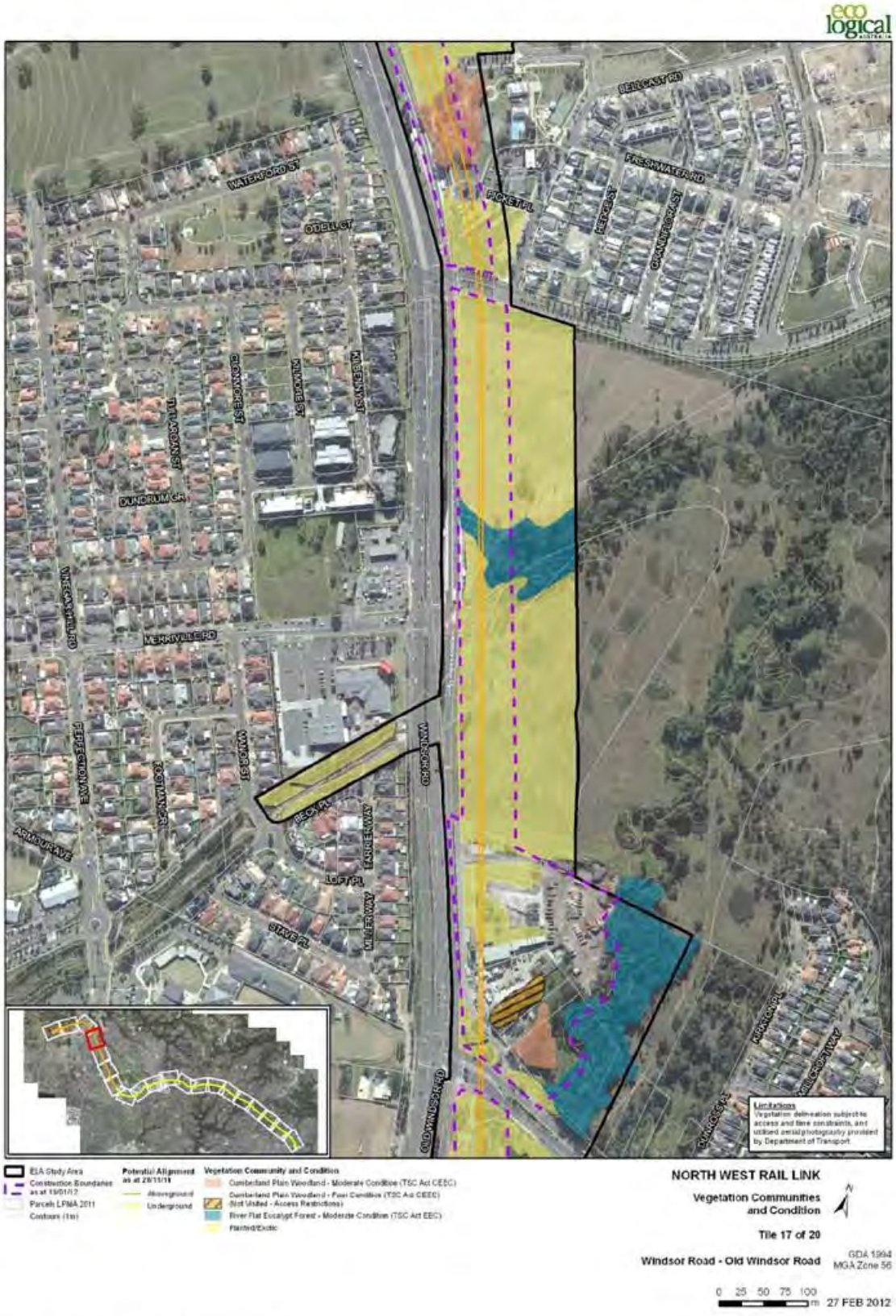
Tile 14: Balmoral Road - Vegetation



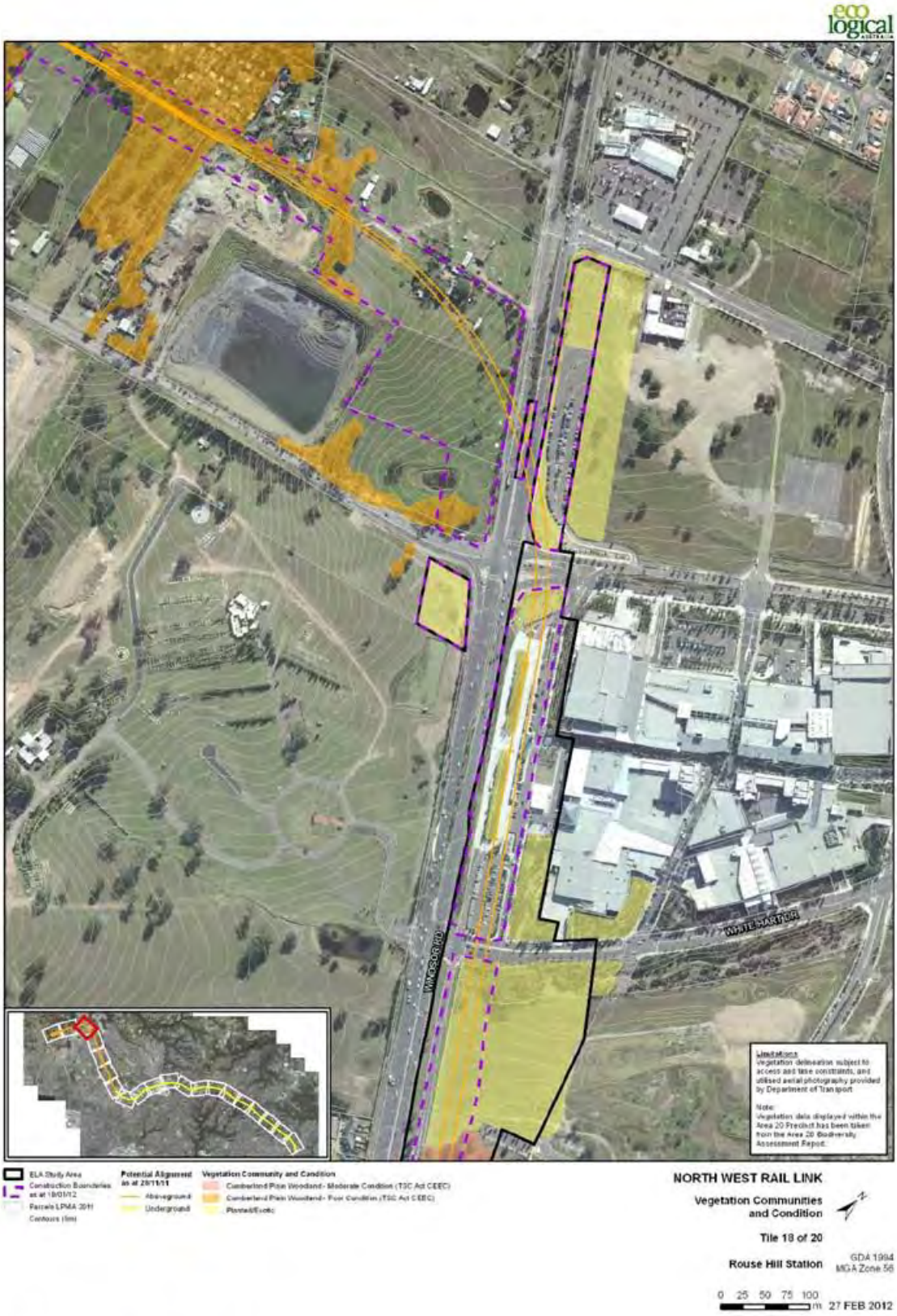
Tile 15: Old Windsor Road - Vegetation



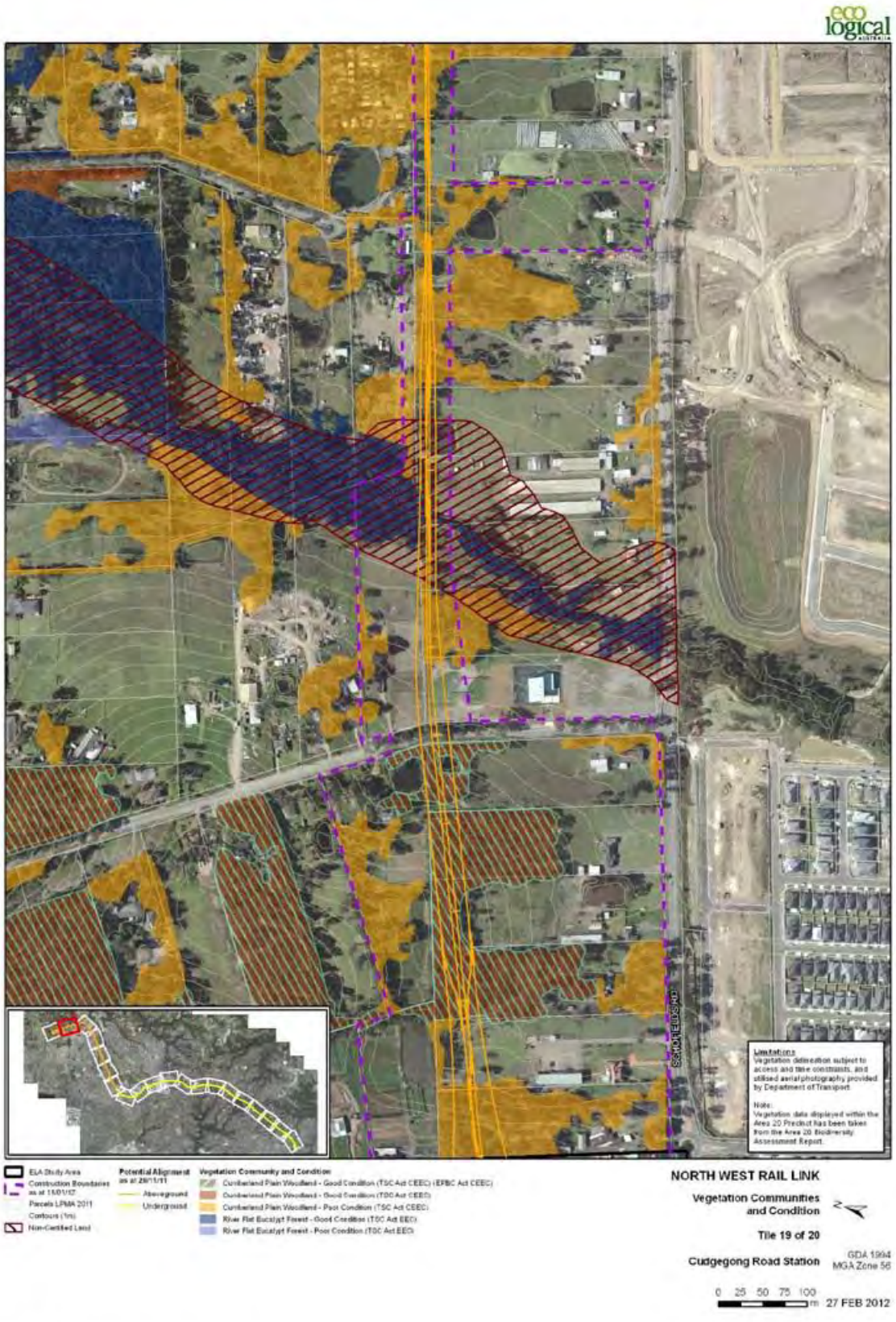
Tile 16: Kellyville - Vegetation



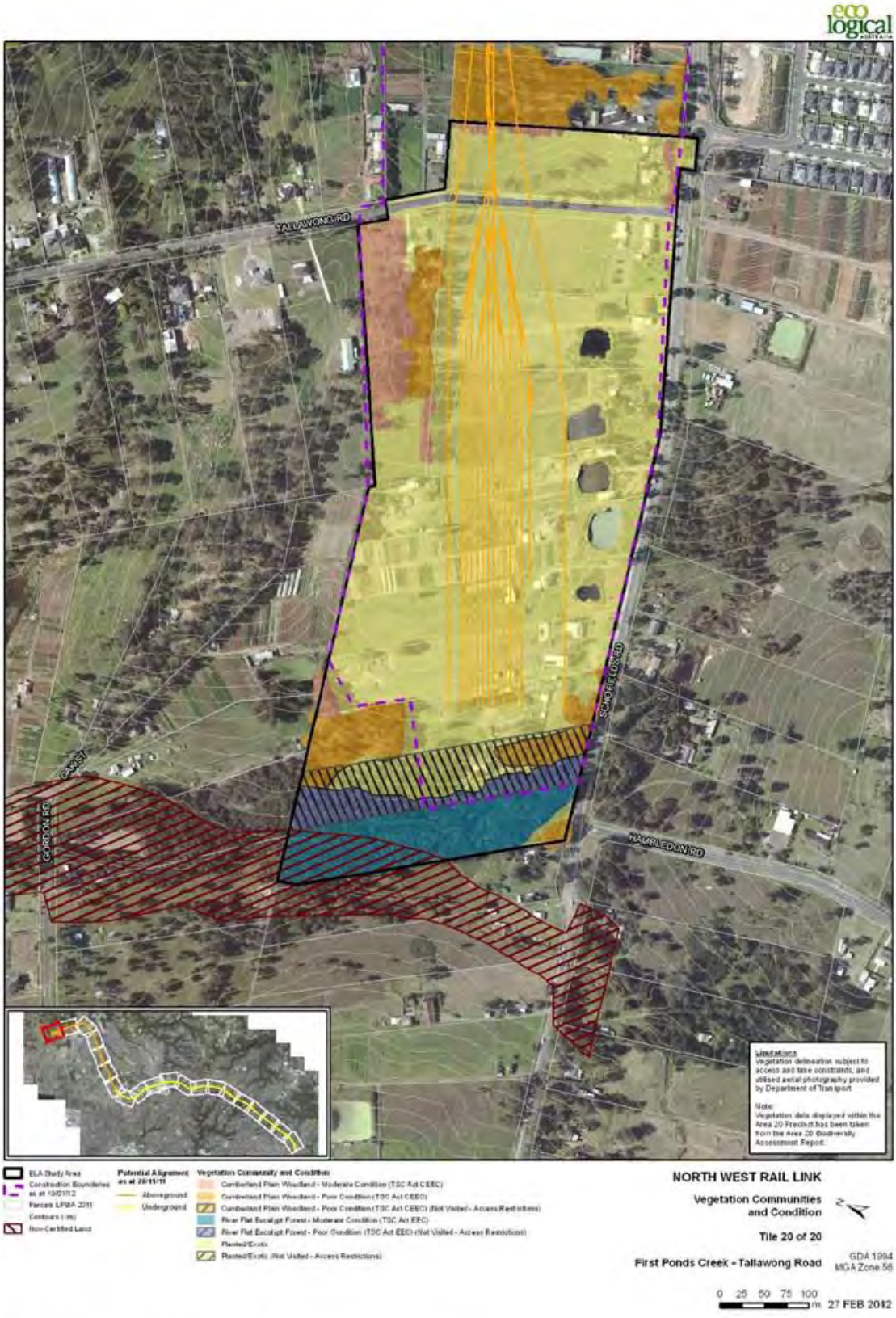
Tile 17: Windsor Road - Vegetation



Tile 18: Rouse Hill - Vegetation



Tile 19: Cudgegong - Vegetation



Tile 20: First Ponds - Vegetation

Appendix D Flora Survey Maps

Epping – Threatened Flora Survey

Cheltenham – Threatened Flora Survey

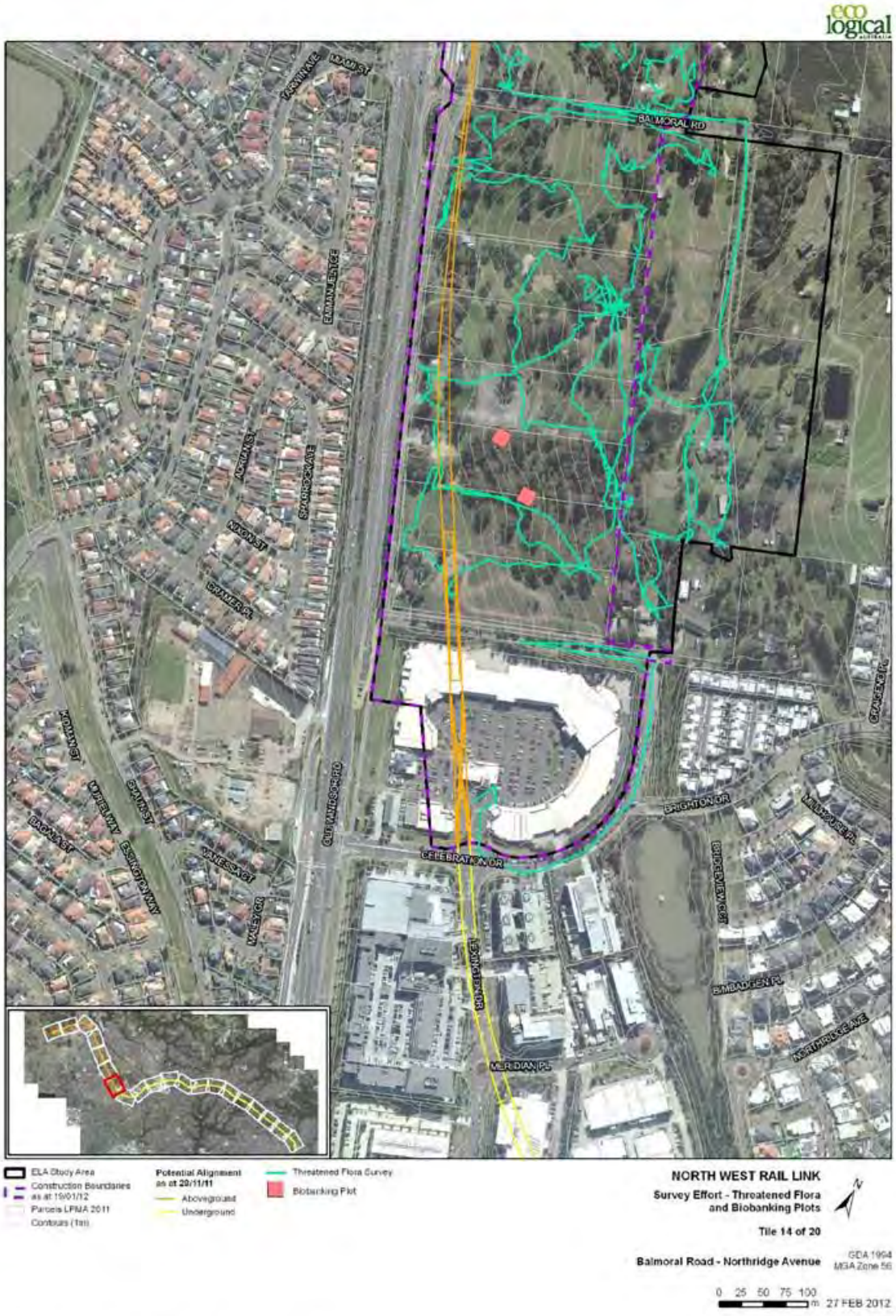
Beecroft – Threatened Flora Survey

Cherrybrook – Threatened Flora Survey

Castle Hill – Threatened Flora Survey

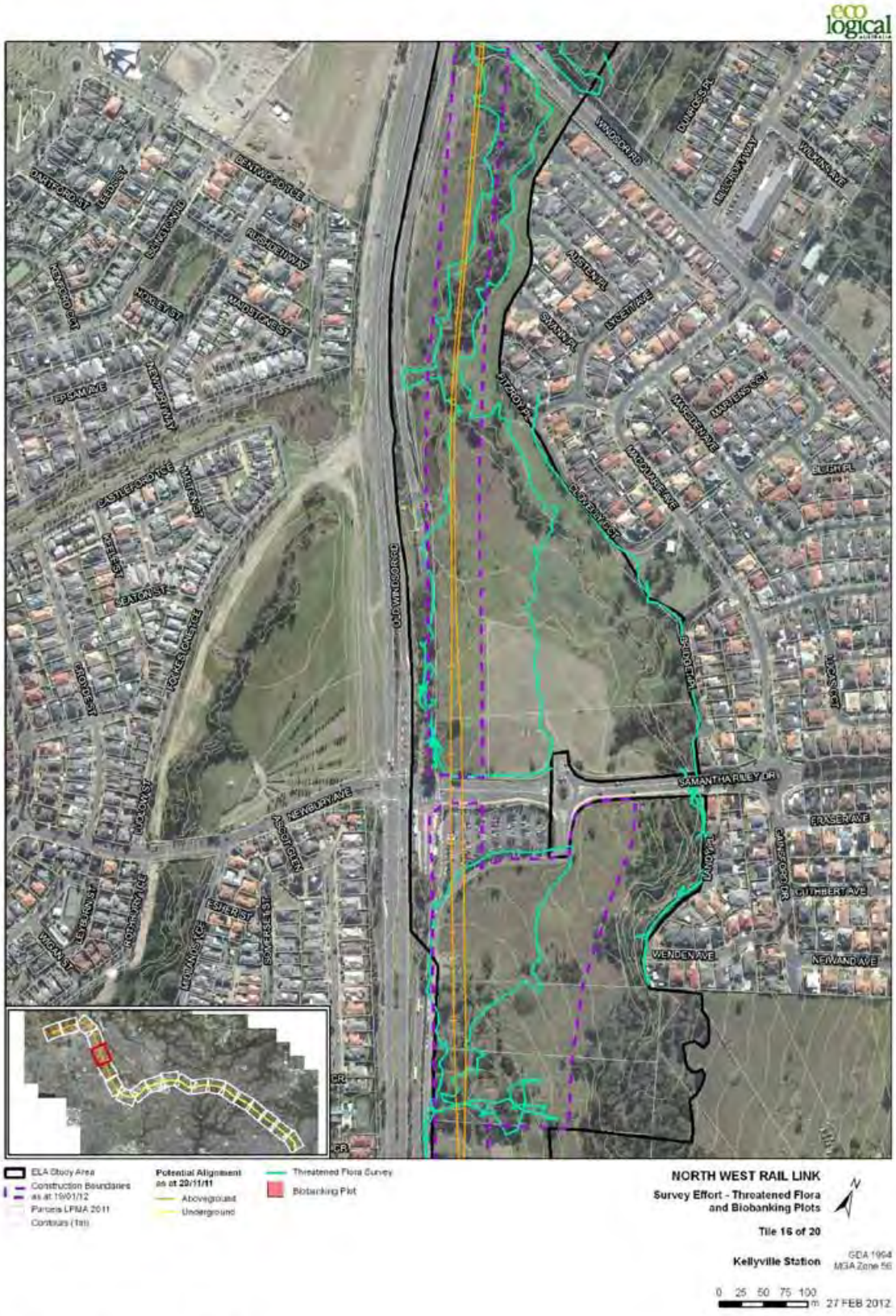
Hills Centre – Threatened Flora Survey

Norwest – Threatened Flora Survey

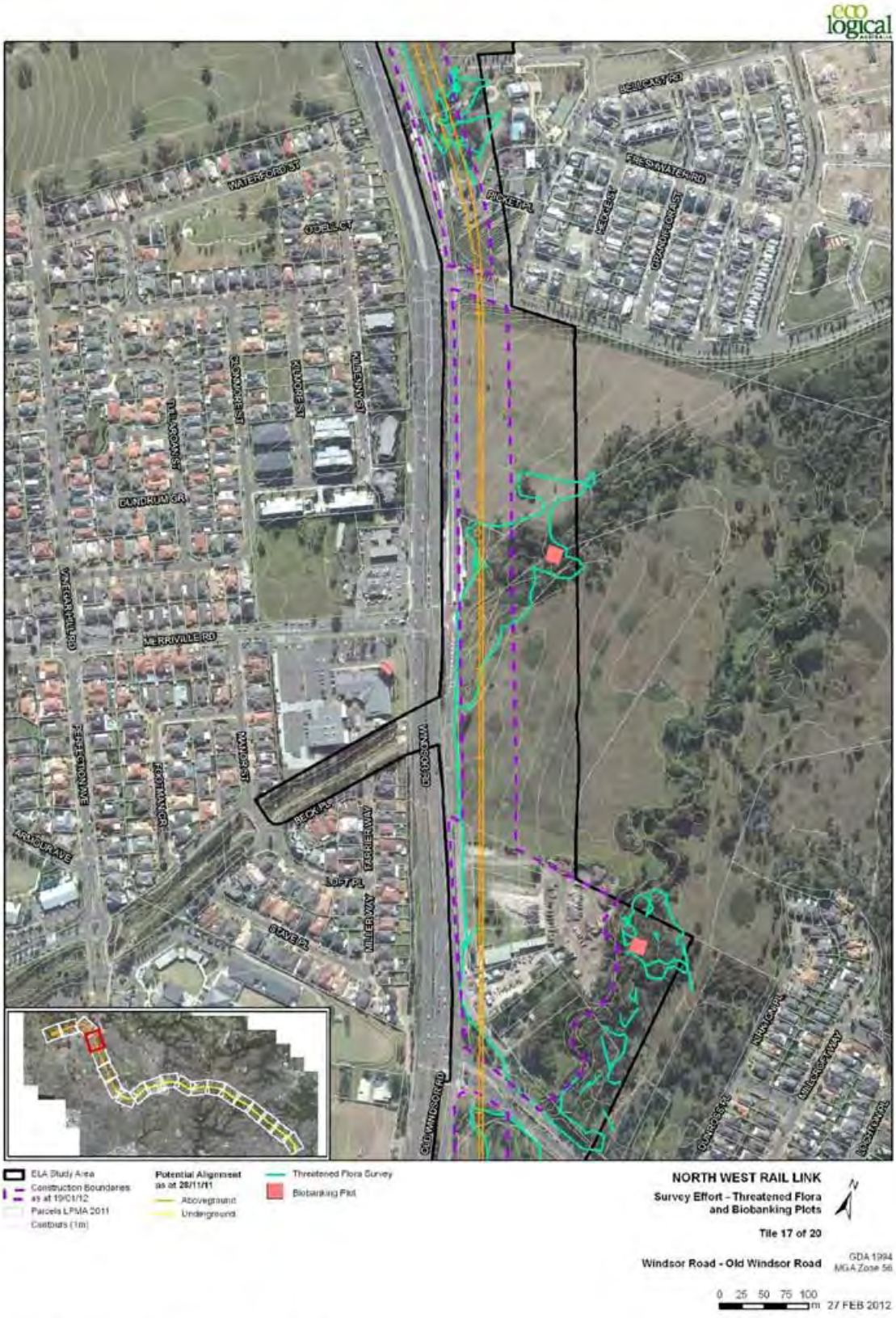


Balmoral Rd – Threatened Flora Survey

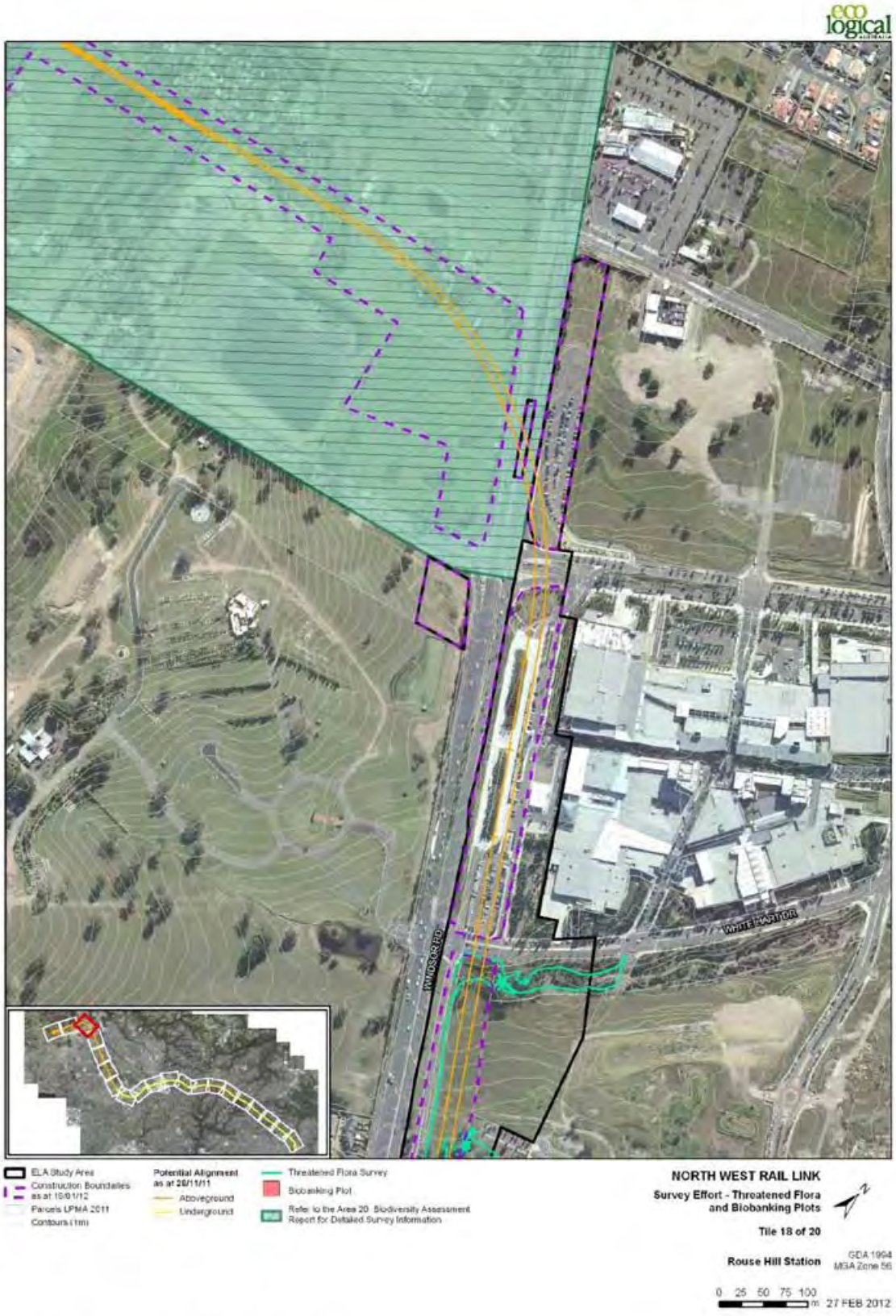
Old Windsor Road – Threatened Flora Survey



Kellyville – Threatened Flora Survey



Windsor Rd – Threatened Flora Survey

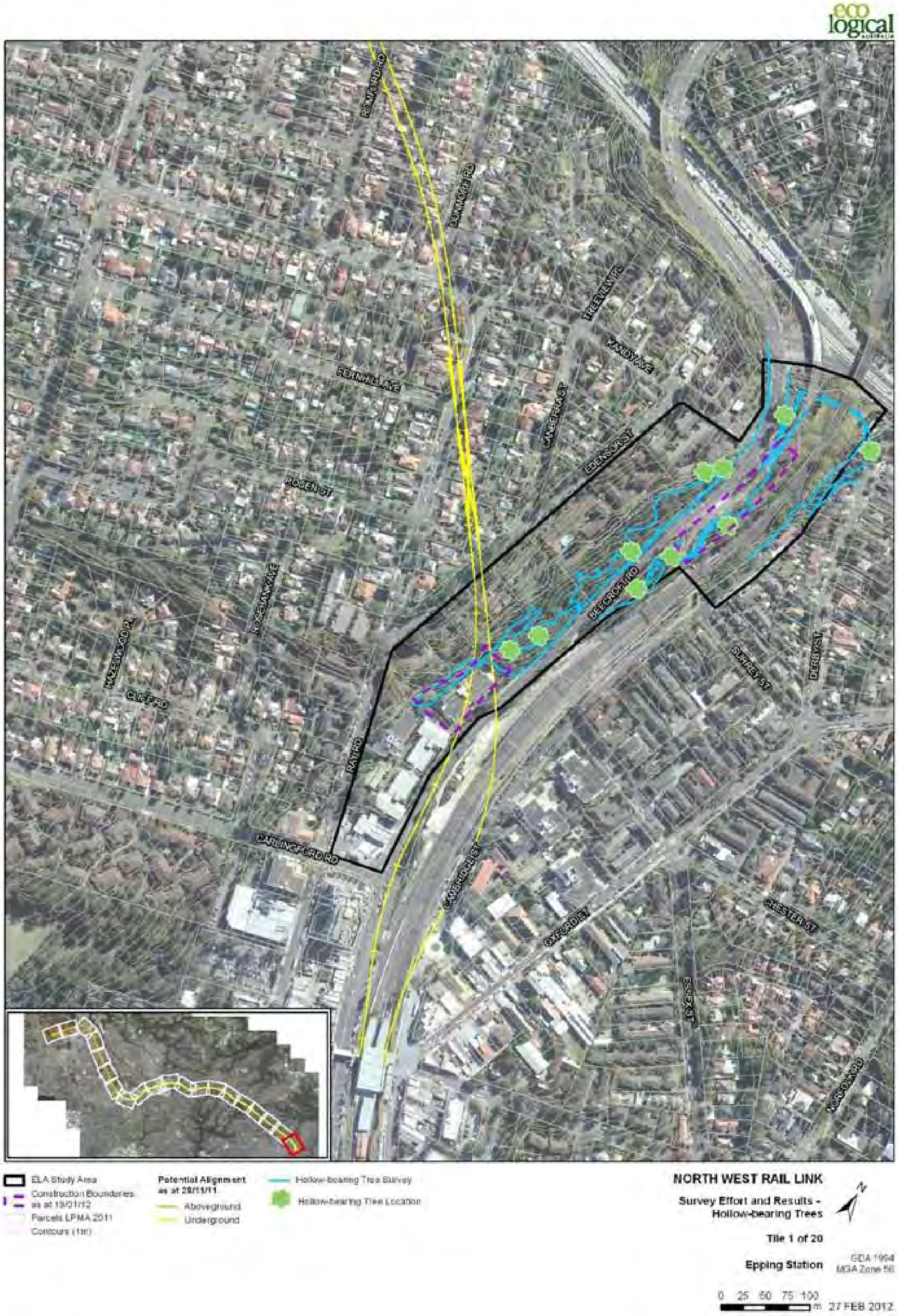


Rouse Hill – Threatened Flora Survey

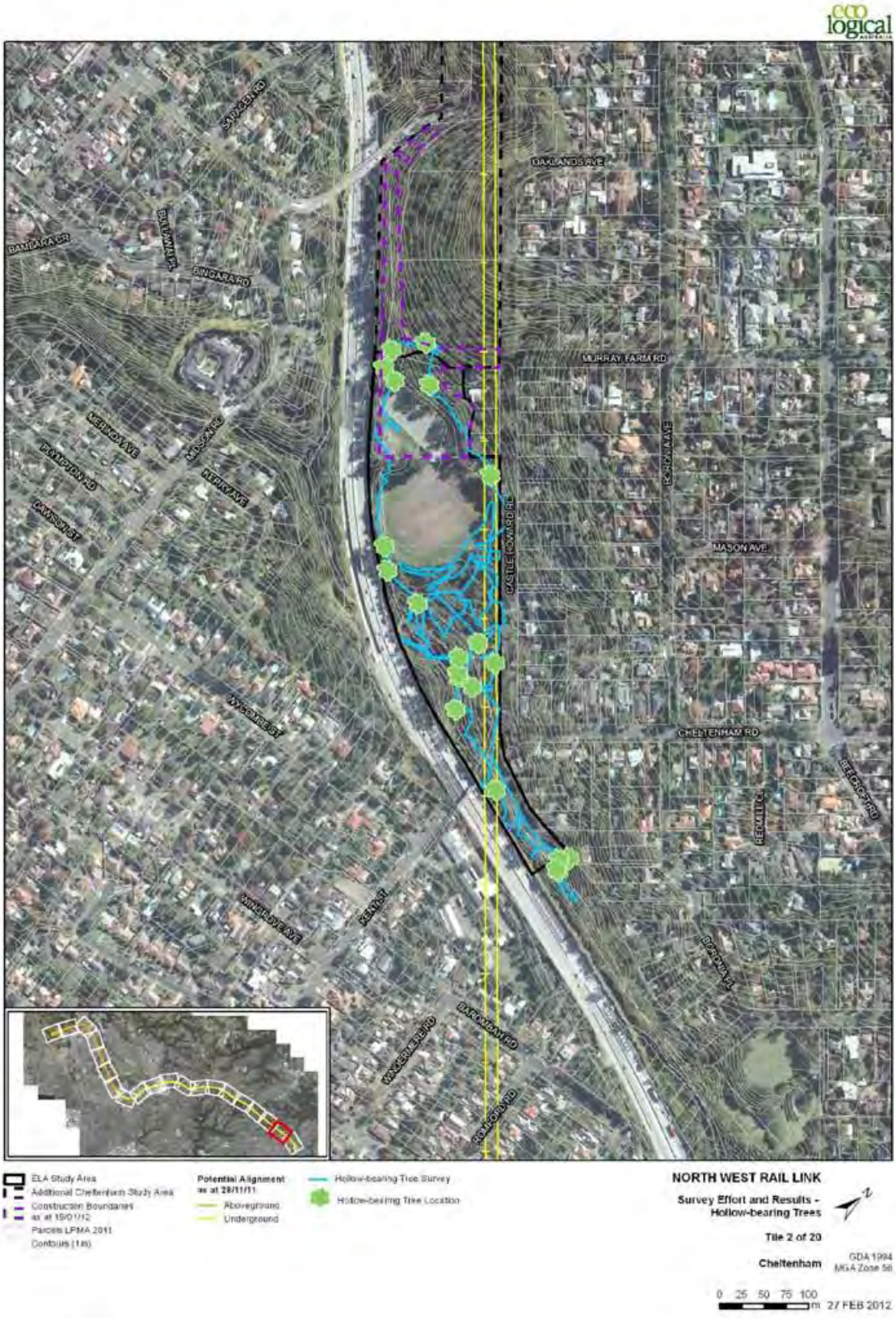
Cudgegong – Threatened Flora Survey

First Ponds Creek – Threatened Flora Survey

Appendix E Hollow Bearing Tree Maps


eco logical
FERNHILL AVE
ROSEN ST
CARLINGFORD RD
BEECROFT RD
SURREY ST
DERBY ST
CHESTER ST
OXFORD ST
ELA Study Area
Construction Boundaries as at 19/01/12
Parcels LPMA 2011
Contours (1m)
Potential Alignment as at 28/11/11
Aboveground
Underground
Hollow-bearing Tree Survey
Hollow-bearing Tree Location
NORTH WEST RAIL LINK
Survey Effort and Results - Hollow-bearing Trees
Tile 1 of 20
Epping Station
GDA 1994 MGA Zone 56
0 25 50 75 100 m
27 FEB 2012

Epping - HBT



Cheltenham - HBT

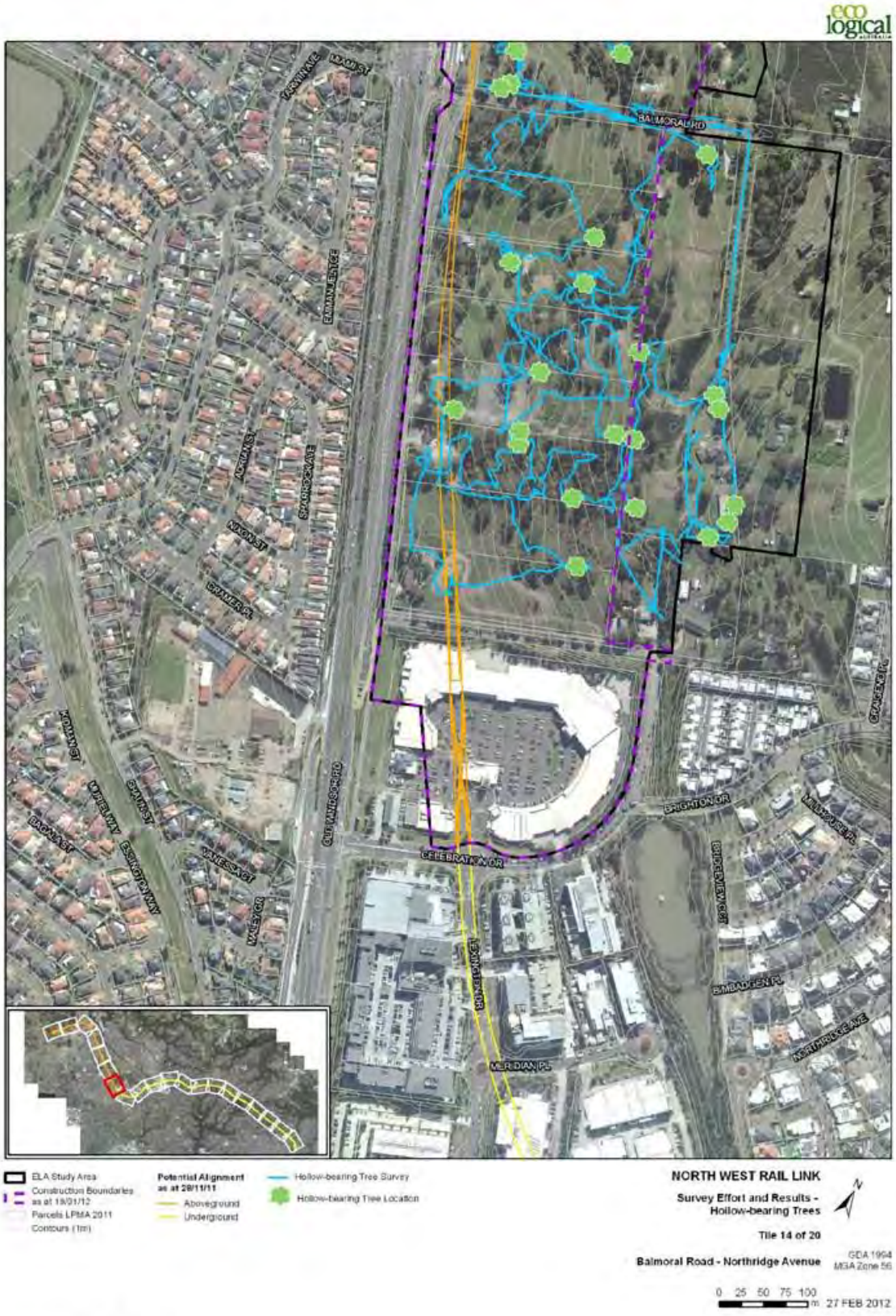
Cherrybrook - HBT

Castle Hill - HBT

Hills Centre - HBT

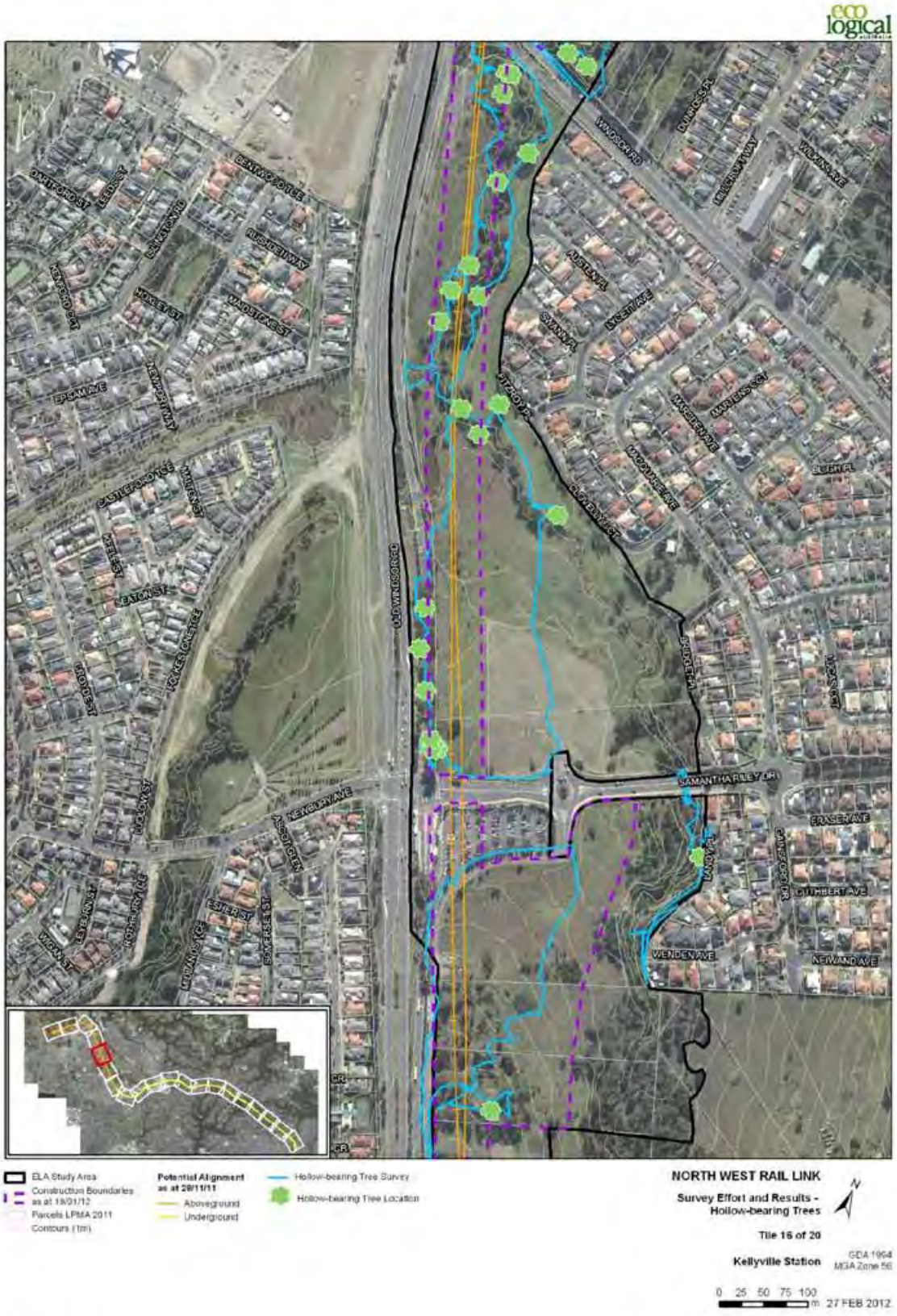

eco logical
SOLENT CT
MAITLAND PL
HILLSBOROUGH WAY
LAKEVIEW CL
ZAKYNTHOS AVE
BARNA DOWN RD
EVESHAM CT
NORWEST BVD
BROOKHOLLOW AVE
KINGSRAVEN PL
PRESTON CRA
GOLF AVENUE
ELA Study Area
Construction Boundaries as at 19/01/12
Parcels LPMA 2011
Contours (1m)
Potential Alignment as at 28/11/11
Aboveground
Underground
Hollow-bearing Tree Survey
Hollow-bearing Tree Location
NORTH WEST RAIL LINK
Survey Effort and Results - Hollow-bearing Trees
Tile 12 of 20
Norwest Station
GDA 1994 MGA Zone 56
0 25 50 75 100 m
27 FEB 2012

Norwest - HBT

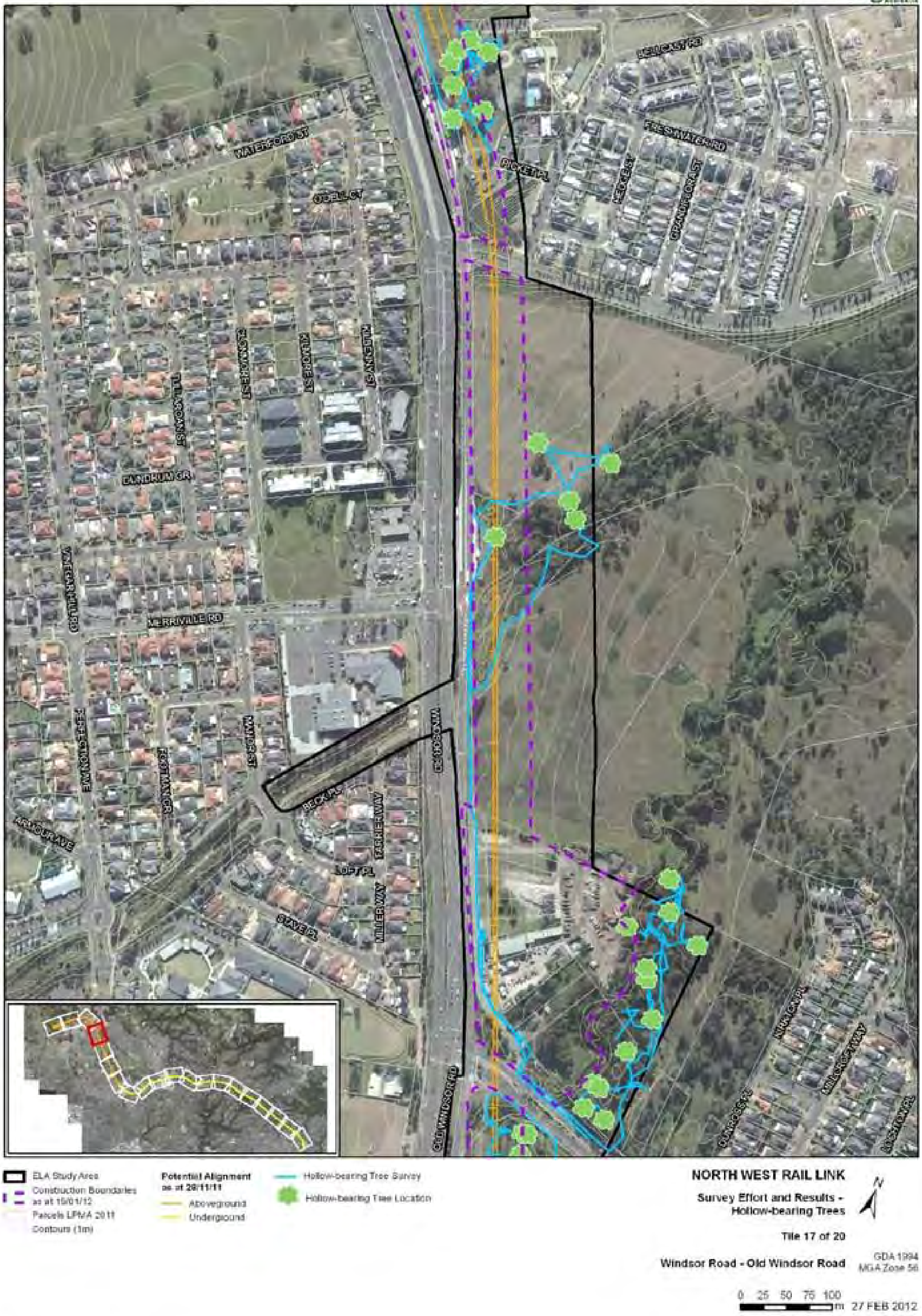


Balmoral Road - HBT

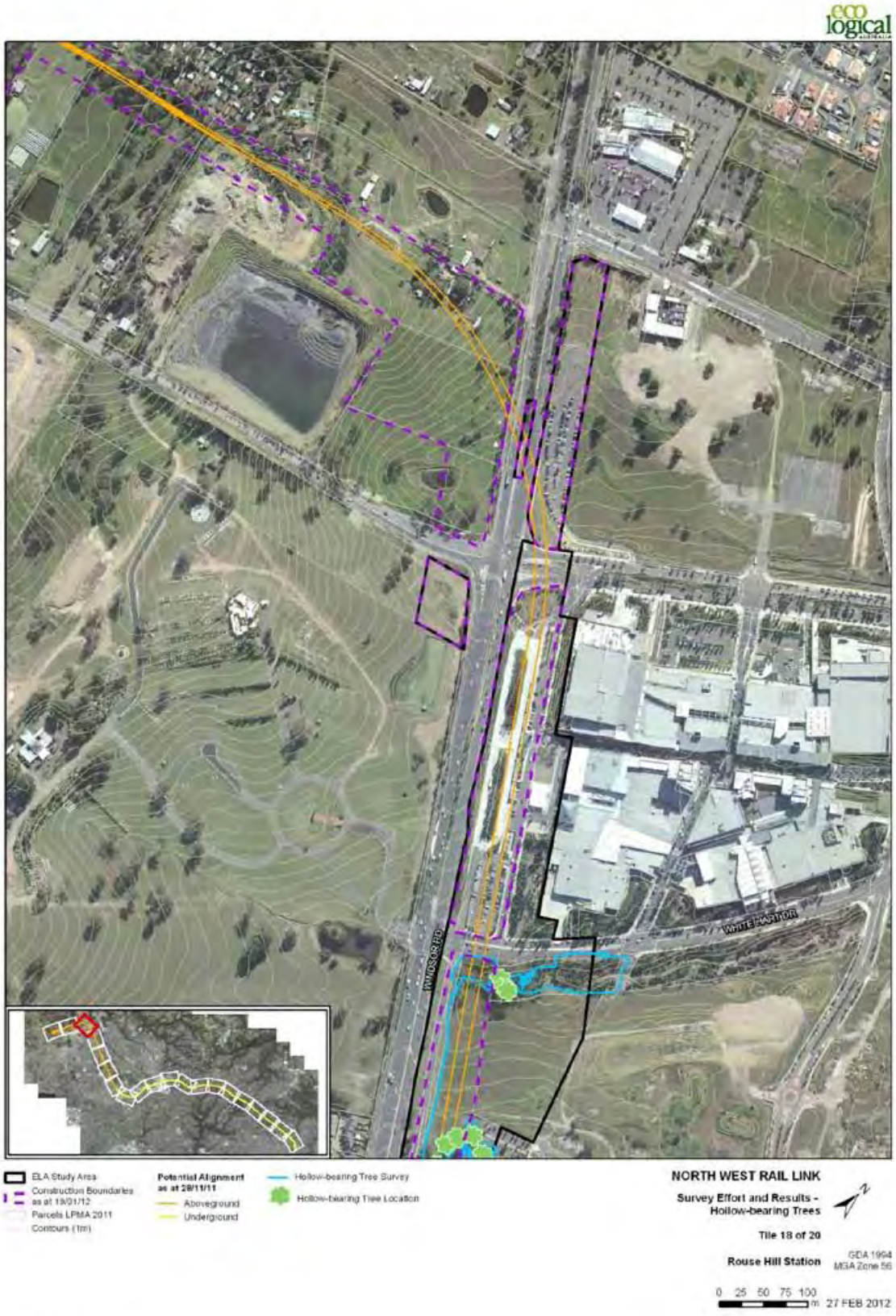
Old Windsor Road - HBT



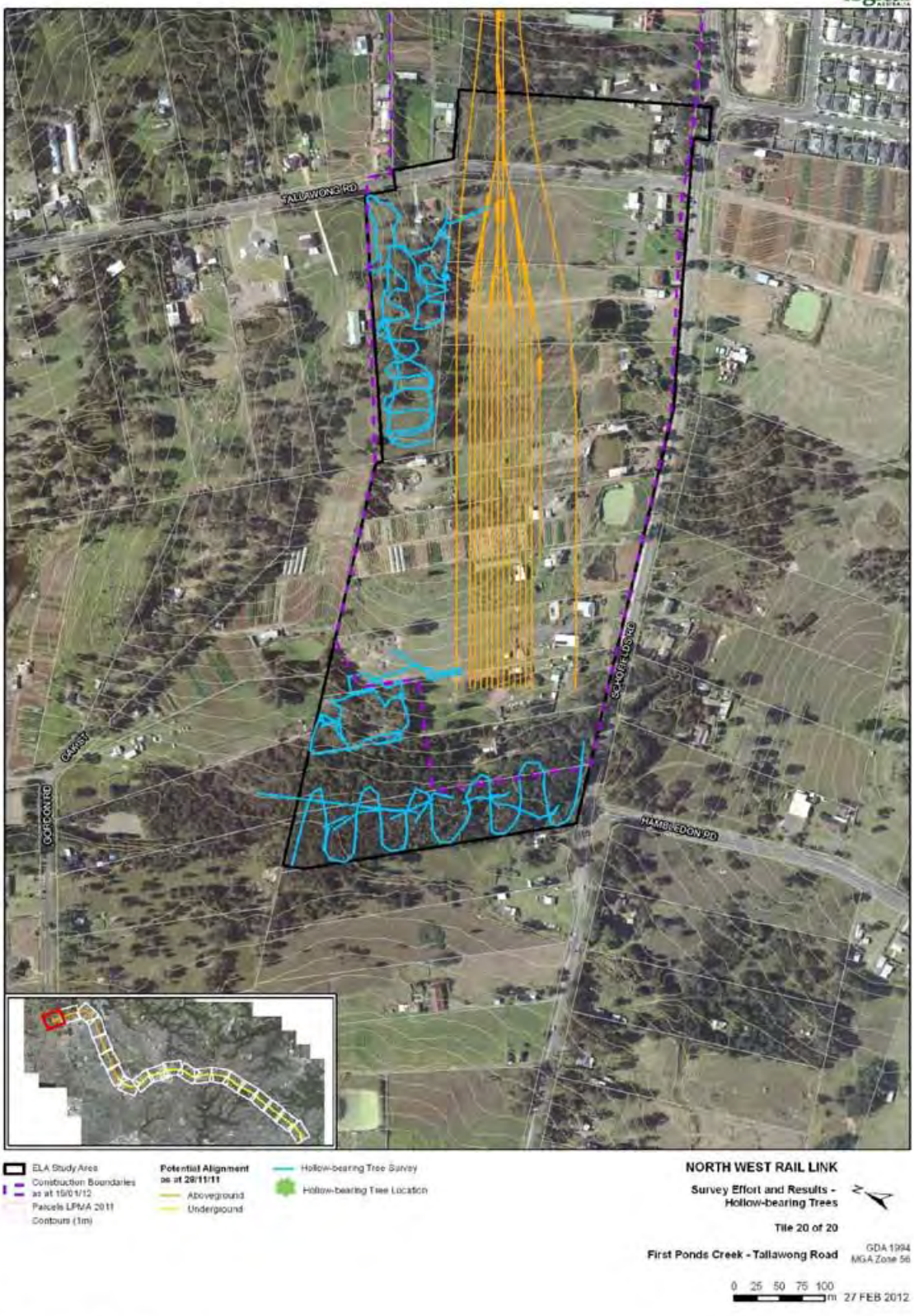
Kellyville - HBT



Windsor Road - HBT



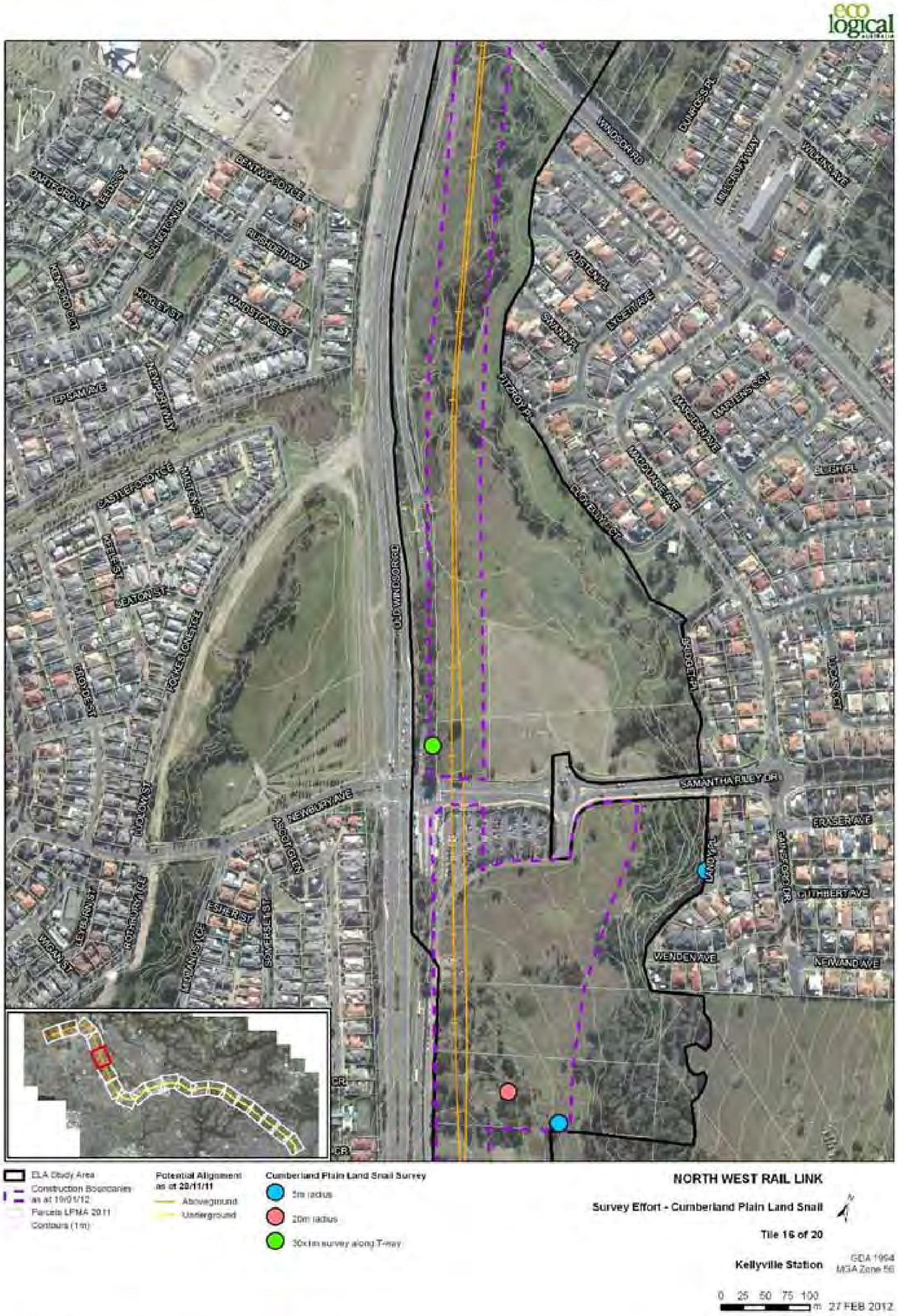
Rouse Hill - HBT



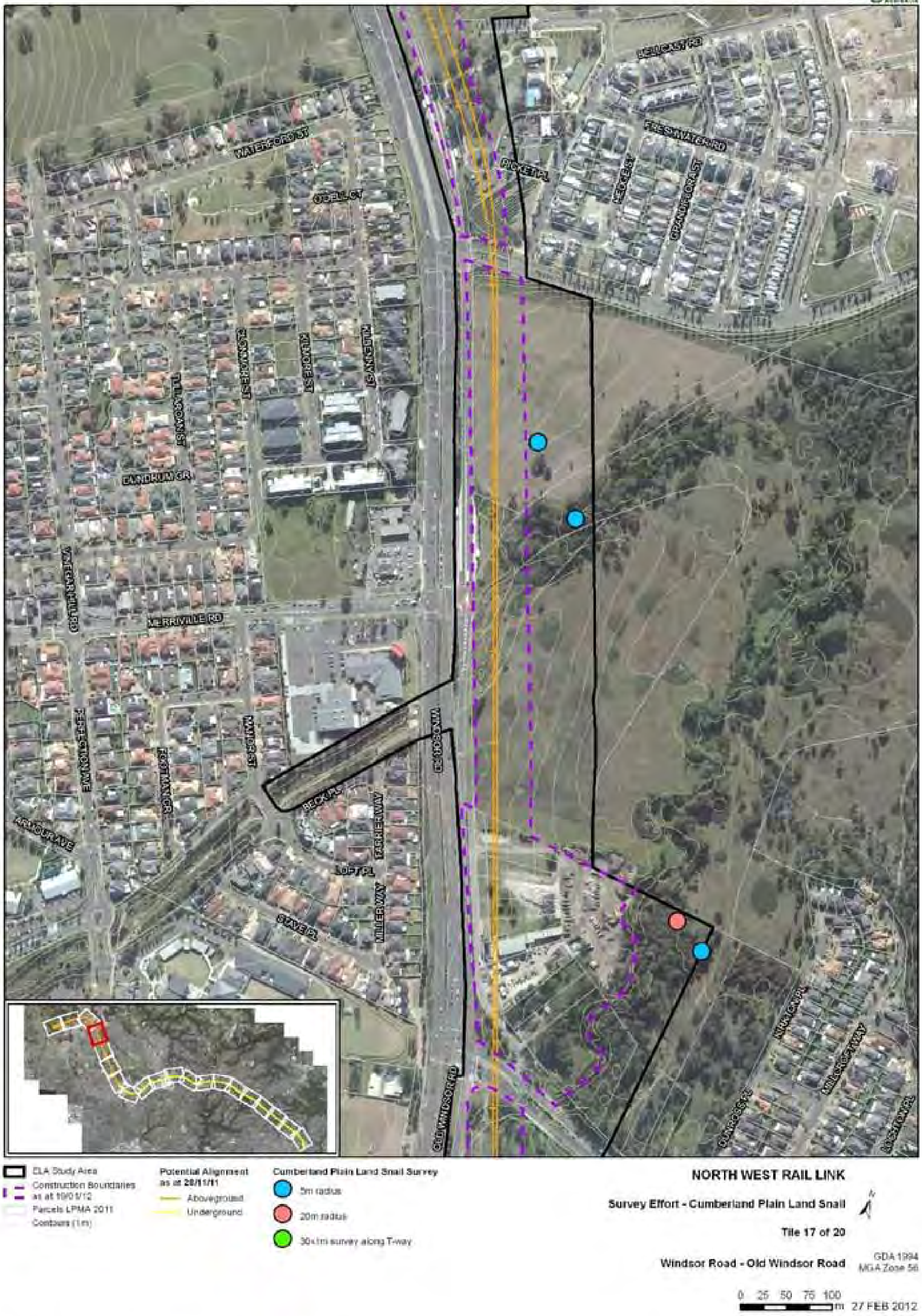
First Ponds Creek - HBT

Appendix F Cumberland Plain Land Snail Survey Maps

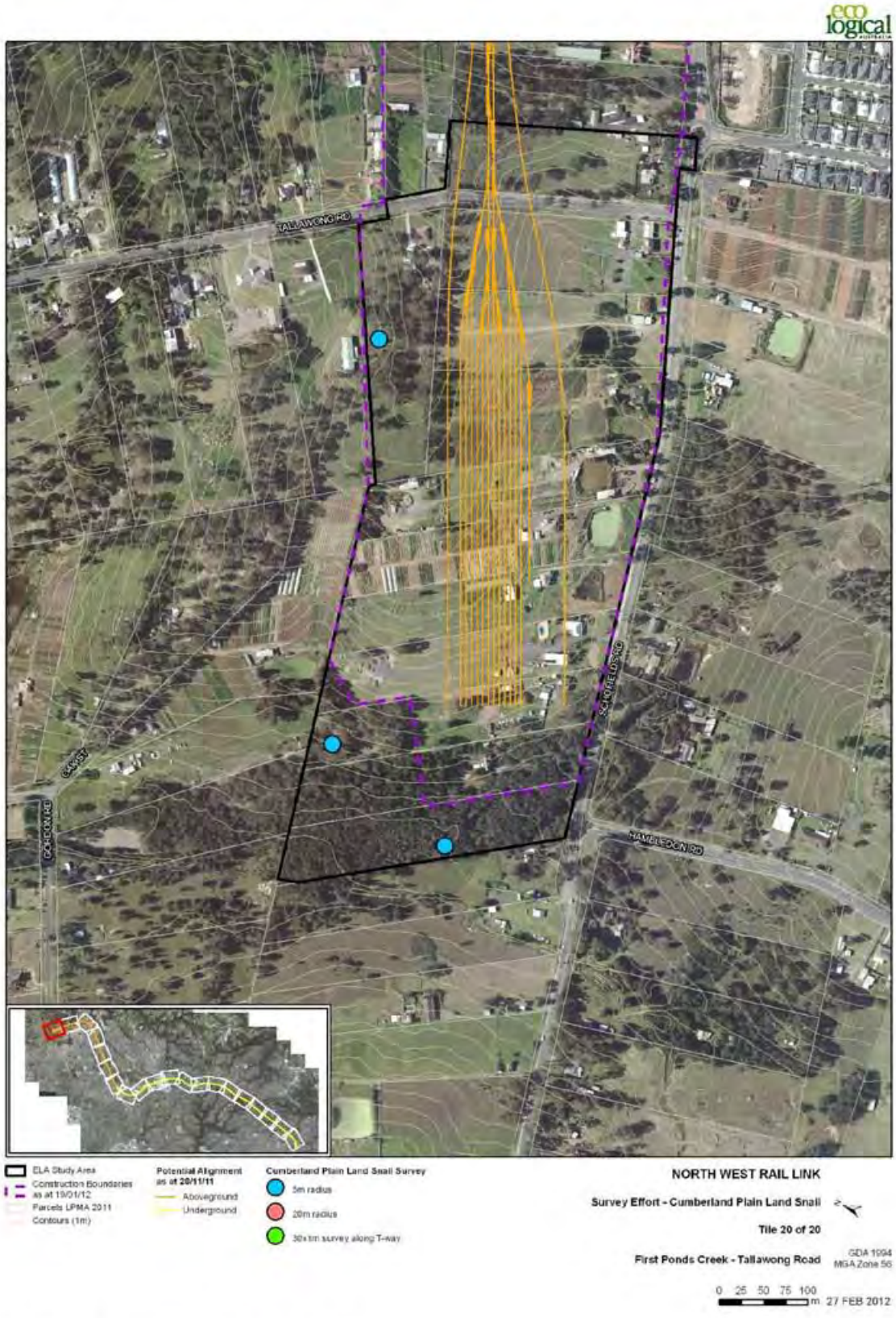
Balmoral Road - Cumberland Plain Land Snail



Kellyville - Cumberland Plain Land Snail



Windsor Rd - Cumberland Plain Land Snail



First Ponds - Cumberland Plain Land Snail

Appendix G Green & Golden Bell Frog Survey Results

G.1 Survey Site Selection

A Green and Golden Bell Frog (GGBF) site / habitat suitability assessment was undertaken on 18th November 2011. This assessment endeavoured to confirm the presence of suitable GGBF habitat and to rank the habitat quality and map the extent of habitat at the various sites. Primary and secondary habitat is identified in the GGBF habitat maps (see Appendix H).

This preliminary site assessment included a desktop assessment of known GGBF records from the surrounding areas and a recent aerial photo analysis, as well as an on-ground assessment of habitat features. Potential for connectivity with the nearest GGBF population was also taken into account in determining the prioritisation of potential habitat areas for survey.

Whilst suitable potential foraging habitat was found across all areas of the proposed NWRL corridor, only certain sections had suitable permanent water bodies that were considered suitable as potential breeding habitat, and which also had suitable shelter/foraging habitat. Some of these better habitat areas also possessed, in some instances, additional potential ephemeral breeding habitat. These areas were targeted during field surveys and identified in the survey effort maps (Appendix H).

G.2 Field Surveys

Each of the land parcels identified as priority sites for targeted GGBF investigation were individually surveyed using the full suite of survey techniques documented as the preferred survey methodologies for GGBF (NPWS 2003b, DEWHA 2009). Methods included diurnal searches scanning for basking individuals amongst emergent vegetation, searches beneath ground cover for sheltering individuals, as well as dip-netting to detect and identify any tadpoles or fish present. Call imitation was also selectively applied diurnally in an endeavour to elicit a call response from basking, but otherwise undetected, males. Nocturnal searches of the same habitat areas were also undertaken. This included using spotlights and headlamps to scan potential habitat areas for active and foraging individuals, frog auditory survey for calling males, recorded call playback to attempt to elicit a response from non-calling males as well as call imitation for the same purpose.

The application of the above survey methodology was timed to occur within the species' preferred activity period (August to March, NPWS 2003b; DEWHA 2009), as well as timed within this period to occur during suitable climatic conditions (warm to hot temperatures following or during rain events, NPWS 2003b; DEWHA 2009). The survey methodology was repeated over four nights in accordance with DEWHA (2009) survey guidelines. The preferred survey periodicity of four consecutive nights was varied in this instance due to cold nocturnal temperatures (11 ° C) experienced on the third survey night and the forecast for high temperatures and substantial rain several days later, which eventuated.

The rationale behind the recommended GGBF survey guidelines (NPWS, 2002; DEWHA 2009) is to endeavour to time surveys to intersect temporally with the GGBF activity period and the breeding activity component of the species' lifecycle when it is most detectable, and when dispersed individuals are more likely to congregate. Furthermore, GGBF tadpoles are quite distinctive and, following spawning, are likely to be present, and therefore detectable, for a substantial period (approximately 12 weeks) when adults may be dispersed and / or absent. Metamorphlings are also likely to remain in the

vicinity of the breeding pond and surrounds for a period after metamorphosis (Pers. Obs. R. Wellington). A further test of this rationale was applied during this survey by undertaking two visits to the nearest GGBF reference site at Riverstone (3 km away in the First Ponds Creek sub-catchment). Both of these visits revealed that GGBF were active and calling the day/night before the current surveys were undertaken, indicating the likely detectability of GGBF at the subject survey sites if present.

Field Survey Results

Surveys of the identified priority habitat areas revealed *Litoria fallax* (Dwarf Green-Tree Frogs) present diurnally from intermittent calls and from a few individuals observed basking. Searches of habitat that included ground cover, where present, around each of the habitat areas revealed *Litoria peronii* (Brown Tree Frogs), and *Limnodynastes peronii* (Brown Striped Marsh Frog). Intermittent diurnal calls revealed *Limnodynastes tasmaniensis* (Spotted Marsh Frogs), *Litoria dentata* (Bleating Tree Frogs), and *Crinia signifera* (Brown Toadlets). Dip netting for tadpoles detected three species of frogs; *Litoria peronii* (Brown Tree Frog), *Limnodynastes peronii* (Brown Striped Marsh Frogs), and Spotted Marsh Frog. Dip netting and diurnal survey of water bodies also revealed the presence of exotic fish and fresh water eels, with Common Carp and Koi Carp varieties of *Cyprinus carpio* being detected in water bodies on properties within First Ponds Creek drainage (Schofields Road sites) and Plague Minnow *Gambusia holbrooki* in water bodies within the Caddies Creek drainage (Windsor Road sites). *Anguilla cf australis* (Freshwater Eels) were visually detected in both sub-catchments. Nocturnal surveys revealed all of the above species, as well as *Litoria verreauxii* (Whirring Tree Frogs) (on the third coolest survey night), *Litoria tyleri* (Tyler's Brown Tree Frog), and the *Uperolea fusca* (Dusky Brown Toadlet), by call during/following heavy rain, but also visually verified by triangulated capture method. No other frog species or their tadpoles were detected during the diurnal and nocturnal searches of the targeted habitat areas. The results of the field survey are summarised in section 3.3.3.

As the priority sites along the NWRL corridor are not known to have any GGBF records, a single replicate of the GGBF survey guideline methodology (DEWHA 2009; NPWS 2003b) was undertaken, as the more onerous recommended replication of survey effort is only considered necessary in known locations of GGBF records.

Table 28: Green & Golden Bell Frog Survey Results

SURVEY SITE	ADDRESS & CO-ORDINATES	DIURNAL SURVEY EFFORTS		NOCTURNAL SURVEY EFFORTS	
		DATE / TIME	RESULTS	DATE / TIME	RESULTS
Tallawong Road to Firts Ponds Creek (Tile 20)	57 Schofields Rd, Rouse Hill 33˚41'44.00"S; 150˚53'53.86"E	21/11/2011 Start 1630 Finish 1650	No frogs were observed or heard calling. Incidental Observations – *Lampropholis delicata; Lampropholis guichenoti; Chelodina longicollis*	21/11/2011 Start 2045 Finish 2115	Auditory Survey and Spotlight/Headlamp search detected: *Litoria fallax* – 15+; *Litoria peronii* – 6+; *Litoria tyleri* – 1; *Crinia signifera* – 2; *Limnodynastes peronii* – 5 No other frogs were detected from visual observations, searching of ground cover or from call imitation/call playback.
		22/11/2011 Start 1445 Finish 1515	No frogs or tadpoles were detected	22/11/2011 Start 2030 Finish 2100	*Litoria peronii* 4+; *Litoria fallax* 1; *Crinia signifera* 1;
		23/11/2011 Start 1520 Finish 1550	*Crinia signifera* calling Incidental Observations: *Lampropholis delicata, Eulamprus quoyii,* Welcome Swallow, Red-rumped Grass Parrot, Australian Raven, Little Grebe, Black Duck, Dusky Moorehen, Chestnut Teal, Masked Lapwing, Sulfur-crested Cockatoo, Indian Mynah	23/11/2011 Start 2015 Finish 2040	*Crinia signifera* 9; *Litoria fallax* 2 (called in response to disturbance only)
		29/11/2011 Start 1540 Finish 1610	*Limnodynastes peronii; Litoria peronii* (calling and tadpoles) Incidental Observations: Chestnut Teal, Pee Wee, Channel-billed Cuckoo, Red-rumped Grass Parrots, Indian Mynah, Starling	29/11/2011 Start 2015 Finish 2045	*Litoria fallax* 12+; *Litoria peronii* 8; *Limnodynastes peronii* 6; *Crinia signifera* 5
	59 Schofields Road, Rouse Hill 33˚41'43.11"S; 150˚53'56.07"E	21/11/2011 Start 1650 Finish 1715 *Southern habitat area*	No frogs observed but two unidentified tadpoles (single species) were collected. No other frogs were detected from visual observations, searching of ground cover or from call imitation Incidental Observations: Koi Carp *Cyprinus carpio*	21/11/2011 Start 2115 Finish 2145	*Litoria peronii* 6+ calling and an amplexing pair observed and 1 active male observed; *Litoria fallax* 8+ calling and observed by spotlight. No other frogs were detected from visual observations, searching of ground cover or from call imitation/call playback.
		21/11/2011 Start 1720 Finish 1745 Northern ephemeral habitat area 0305094; 6269869 GDA 94 Z 56	*Litoria dentata* heard calling, two tadpole specimens collected, one tadpole was of the Brown Striped Marsh Frog *Limnodynastes peronii,* the other *Limnodynastes tasmaniensis.* No other frogs were detected from visual observations, searching of ground cover or call imitation.		
		22/11/2011 Start 1515 Finish 1545	No Frogs or tadpoles detected Incidental Observations: Koi Carp *Cyprinus carpio*; *Lampropholis delicata; Rattus rattus*	22/11/2011 Start 2100 Finish 2130	*Litoria peronii* 5+; *Litoria fallax* 5;
		23/11/2011 Start 1600 Finish 1630	*Limnodynastes peronii, Litoria dentata, Limnodynastes tasmaniensis* (tadpoles) Incidental Observations: *Eulamprus quoyii, Tiliqua scincoides, Lampropholis delicata, Lampropholis guichenoti,* Koi Carp, Magpie, Kookaburra, Double-barred Finch, Black-faced Cuckoo-shrike, Common Bronzewing Pigeon, Pee Wee, Masked Lapwing, Restless Flycatcher, Superb Blue Wren,	23/11/2011 Start 2040 Finish 2100	*Limnodynastes peronii* 8; *Uperoleia fusca* 3; *Litoria peronii* 3; *Crinia signifera* 6; *Litoria dentata* 6+ (at a distance from the site) Incidental Observations: Barn Owl *Tyto alba*

SURVEY SITE	ADDRESS & CO-ORDINATES	DIURNAL SURVEY EFFORTS		NOCTURNAL SURVEY EFFORTS	
		DATE / TIME	RESULTS	DATE / TIME	RESULTS
			House Sparrow, Starling		
		29/11/2011 Start 1610 Finish 1650	*Litoria fallax, Limnodynastes peronii* (Juvenile and tadpoles) Incidental Observations: *Lampropholis delicata, Tiliqua scincoides*, Little Corella, Indian Mynah, Common Carp *Cyprinus carpio,* Magpie, Indian Turtle Dove, House Sparrow, Starling	29/11/2011 Start 2045 Finish 2115	*Litoria peronii* 5+; *Litoria fallax* 8; *Litoria dentata* 3; *Uperoleia fusca* 2;
	61 Schofields Rd, Rouse Hill 33˚41'42.17"S; 150˚53'58.11"E	21/11/2011 Start 1745 Finish 1805	*Litoria fallax* calling; *Crinia signifera* calling, no other frogs were detected from visual observations, searching of ground cover or from call imitation. Incidental Observations: Common Carp *Cyprinus carpio* 'Fry' collected during dip-netting and dead adults observed in dried out ephemeral overflow depression; Freshwater Eel *Anguilla cf australis*.	21/11/2011 Start 2145 Finish 2205	*Litoria fallax* – 6; *Litoria peronii* – 4 detected calling. No other frogs were detected from visual observations using spotlight/headlamp or from call imitation/call playback.
		22/11/2011 Start 1545 Finish 1610	No frogs or tadpoles detected Incidental Observations: Koi Carp and Common Carp *Cyprinus carpio*;	22/11/2011 Start 2130 Finish 2200	*Limnodynastes peronii* 1; *Crinia signifera* 1; *Litoria fallax* 1;
		23/11/2011 Start 1730 Finish 1800	*Crinia signifera, Limnodynastes peronii* Incidental Observations: *Lampropholis delicata*, Red-whiskered Bul Bul, Black-faced Cuckoo-shrike, Magpie, Brown Wood Swallow, White-napped Honeyeater, Channel-billed Cuckoo	23/11/2011 Start 2100 Finish 2120	*Limnodynastes peronii* 6; *Crinia signifera* 11; *Litoria peronii* 1
		29/11/2011 Start 1700 Finish 1730	*Crinia signifera* Incidental Observations: Common Carp (fry) and Koi (adult) *Cyprinus carpio*, Black-faced Cuckoo Shrike, House Sparrow, Restless Flycatcher, Red-whiskered Bul Bul, White-naped Honeyeater, Magpie, Superb Blue-wren,	29/11/2011 Start 2115 Finish 2130	*Limnodynastes peronii* 12+; *Crinia signifera* 20+; *Litoria fallax* 3
	68 Schofields Rd, Rouse Hill 33˚41'41.56"S; 150˚54'10.54"E	21/11/2011 Start 1810 Finish 1830 – main dam; Start 1830 Finish 1845 - Typha pond	Tadpoles of *Litoria peronii* were collected during dipnetting in main dam. No other frogs were detected from visual observations, searching of ground cover or from call imitation around main dam. *Limnodynastes peronii* was detected from calls throughout the Typha pond but no other frogs were detected from visual observations, searching of ground cover or from call imitation around the Typha pond. Incidental Observations: Eastern Water Skink *Eulamprus quoyii, Lampropholis delicate*	21/11/2011 Start 2210 Finish 2240 AEDST	*Litoria fallax* 30+; *Litoria peronii* 15+; *Limnodynastes peronii* 15+ calling from sullage pond with Typha on property boundary; *Litoria tyleri* 2; *Litoria verreauxii* 1;
		22/11/2011 Start 1615 Finish 1645	*Litoria peronii* tadpoles collected; *Litoria fallax* calling	22/11/2011 Start 2200 Finish 2230	*Litoria peronii* 8; *Litoria verreauxii* 1; *Limnodynastes peronii* 8+; *Limnodynastes tasmaniensis* 1; *Litoria fallax* 10+; *Limnodynastes peronii* foamy eggmass detected.
		23/11/2011 Start 1800 Finish 1830	*Crinia signifera, Limnodynastes peronii* (calling) and metamorphling captured, *Limnodynastes tasmaniensis, Litoria dentata*	23/11/2011 Start 2120 Finish 2140	*Litoria peronii* 2; *Crinia signifera* 6; *Limnodynastes peronii* 8; *Limnodynastes tasmaniensis* 3; *Litoria verreauxii* 1

SURVEY SITE	ADDRESS & CO-ORDINATES	DIURNAL SURVEY EFFORTS		NOCTURNAL SURVEY EFFORTS	
		DATE / TIME	RESULTS	DATE / TIME	RESULTS
			Incidental Observations: Red-rumped Grass Parrot, Magpie, Black-faced Cuckoo-shrike, White-napped Honeyeater, Red Wattle Bird, Reed Warbler, Welcome Swallow, Silver Eye, Red-browed Finch, Starling, Rabbit		
		29/11/2011 Start 1730 Finish 1800	*Litoria fallax; Limnodynastes peronii, Litoria peronii* (tadpoles) Incidental Observations: *Eulamprus quoyii* 3; *Pseudechis porphyriacus*; Dusky Moorehen, Australian Raven; Reed Warbler	29/11/2011 Start 2130 Finish 2155	*Litoria peronii* 15; *Litoria fallax* 20+; *Limnodynastes peronii* 30+; *Crinia signifera* 1;
Samantha Riley Drive to Windsor Road (Tile 16)	Caddies Creek (Northern site) 33˚42'32.78"S; 150˚56'40.47"E	21/11/2011 Start 1815 Finish 1845	*Crinia signifera* calling; *Litoria fallax* calling; *Limnodynastes peronii* calling from drain leading to ox-bow. Incidental Observations: Plague Minnow *Gambusia holbrooki* detected by dip netting and visually.		
		22/11/2011 Start 1655 Finish 1720	*Crinia signifera* calling	22/11/2011 Start 2240 Finish 2300	*Crinia signifera* 6; *Litoria fallax* 6
		23/11/2011 Start 1840 Finish 1900	*Crinia signifera* calling; *Limnodynastes peronii* calling Incidental Observations: Plague Minnow *Gambusia holbrooki* (fry), *Lampropholis delicata*, Large Black Cormorant, Little-pied Cormorant, Red-rumped Grass Parrot, Starlings	23/11/2011 Start 2155 – 2220	*Crinia signifera* 2
		29/11/2011 Start 1800 Finish 1830	No frogs or tadpoles detected Incidental Observations: Plague Minnow *Gambusia holbrooki*; Red-rumped Grass parrots, Starlings, Indian Mynah	29/11/2011 Start 2210 Finish 2230	*Crinia signifera* 6; *Limnodynastes peronii* 5; *Litoria fallax* 6
	Caddies Creek (Southern site) 33˚42'32.81"S; 150˚56'40.45"E	21/11/2011 Start 1850 Finish 1915	*Crinia signifera* calling; no other frogs or tadpoles detected. Incidental Observations: Plague Minnow *Gambusia holbrooki* detected by dip netting and visually.		
		22/11/2011 Start 1725 Finish 1745	No frogs or tadpoles detected	22/11/2011 Start 2305 Finish 2325	*Crinia signifera* 2; No other frogs detected.
		23/11/2011 Start 1905 Finish 1930	*Crinia signifera* Incidental Observations: Plague Minnow *Gambusia holbrooki*, Rainbow Lorikeets, Little Corella, Galah, Magpie, Eastern Rosella	23/11/2011 Start 2230 Finish 2250	*Crinia signifera* 1; *Litoria verreauxii* 1 (calling at a distance)
		29/11/2011 Start 1830 Finish 1900	*Crinia signifera, Litoria dentata*, Incidental Observations: Plague Minnow *Gambusia holbrooki*; Little Corella, Galah, Eastern Rosella, Magpie, Indian Mynah	29/11/2011 Start 2235 Finish 2300	*Crinia signifera* 5; *Litoria fallax* 2;
Cheltenham (Tile 2)	Devlins Creek 33˚45'42.19"S; 150˚40'20.92"E	Start 1815 Finish 1830	Site totally unsuitable for GGBF. Forest vegetation with warm temperate rainforest understorey species in heavily shaded gully. Creek with high flow velocity. Veracity of previous GGBF record from vicinity of this site is highly questionable. The site does not warrant any further survey effort for this species and no additional effort was applied.		

G.3 Comments

The Riverstone East Precinct of the NWGC is the nearest and most recent sighting of GGBF records, (approximately 3 km from the Schofields Road sites of the NWRL corridor). Drainage from the western-most sections of the NWRL corridor is part of the First Ponds Creek sub-catchment of Eastern Creek, which drains to the north-west through Riverstone to Eastern Creek. The identified Riverstone GGBF element of the Western Sydney GGBF Key Population was identified in the Draft GGBF Recovery Plan (NPWS 2003b) however no regional key population management plan has, as yet, been prepared for this key population though actioned under the Draft GGBF Recovery Plan and Priority Action Statement (PAS) for the species.

One component of the 'biocertification' process was to undertake rigorous targeted GGBF surveys within a specified area at Riverstone (Eco Logical Australia, 2007). This study confirmed the presence of GGBF at Riverstone, and validated all the previous observations in that locality. The study found that GGBF were concentrated at a single location at Riverstone, where a semi-captive colony exists. It also concluded that additional GGBF records from the immediate vicinity were likely emanating from the focal distribution point. Specimens observed were considered likely dispersing individuals and the study triggered additional follow up surveys at other historical western Sydney GGBF sites but the GGBF failed to be redetected (Jurd, 2008).

Consequently there is a desire, as expressed in the Recovery Plan, as well as in each of the nine subsidiary Key Population Management Plans (DECC 2007; 2008), that habitat creation, retention and rehabilitation are desirable outcomes where the GGBF is recorded or known from nearby. Nevertheless there are no known GGBF records in recent times (after 1975) from the immediate proximity of the NWRL study site. However, it is impossible to rule out the possibility of GGBF moving to or from or through the subject corridor lands from time to time but the potential habitat on site is unremarkable. The most suitable areas of habitat observed are artificial human constructed earth walled dams along existing ephemeral/intermittent drainages or modified ox-bows and constructed detention basins. These structures have become vegetated to varying extents with fringing emergent *Typha, Juncus, Cyperus* and *Eleocharus* spp. that are recognised for their values to the GGBF for shelter and foraging as well as possible basking potential. These same structures may also provide breeding habitat values, although these values are lessened by the proliferation of Plague Minnow *Gambusia holbrooki* and varieties of exotic Carp *Cyprinus carpio*.

GGBF have in more recent times been recorded more regularly successfully breeding in ephemeral locations of which there are few on the subject corridor lands. This phenomenon is thought to be the consequence of the prevalence of Frog Chytrid caused by the pathogen *Batrachochytrium dendrobatidis* that renders more permanent bodies of water less suitable due to the persistence of this pathogen (a Key Threatening Process) in permanent water that does not experience drying episodes which is believed to eliminate it.

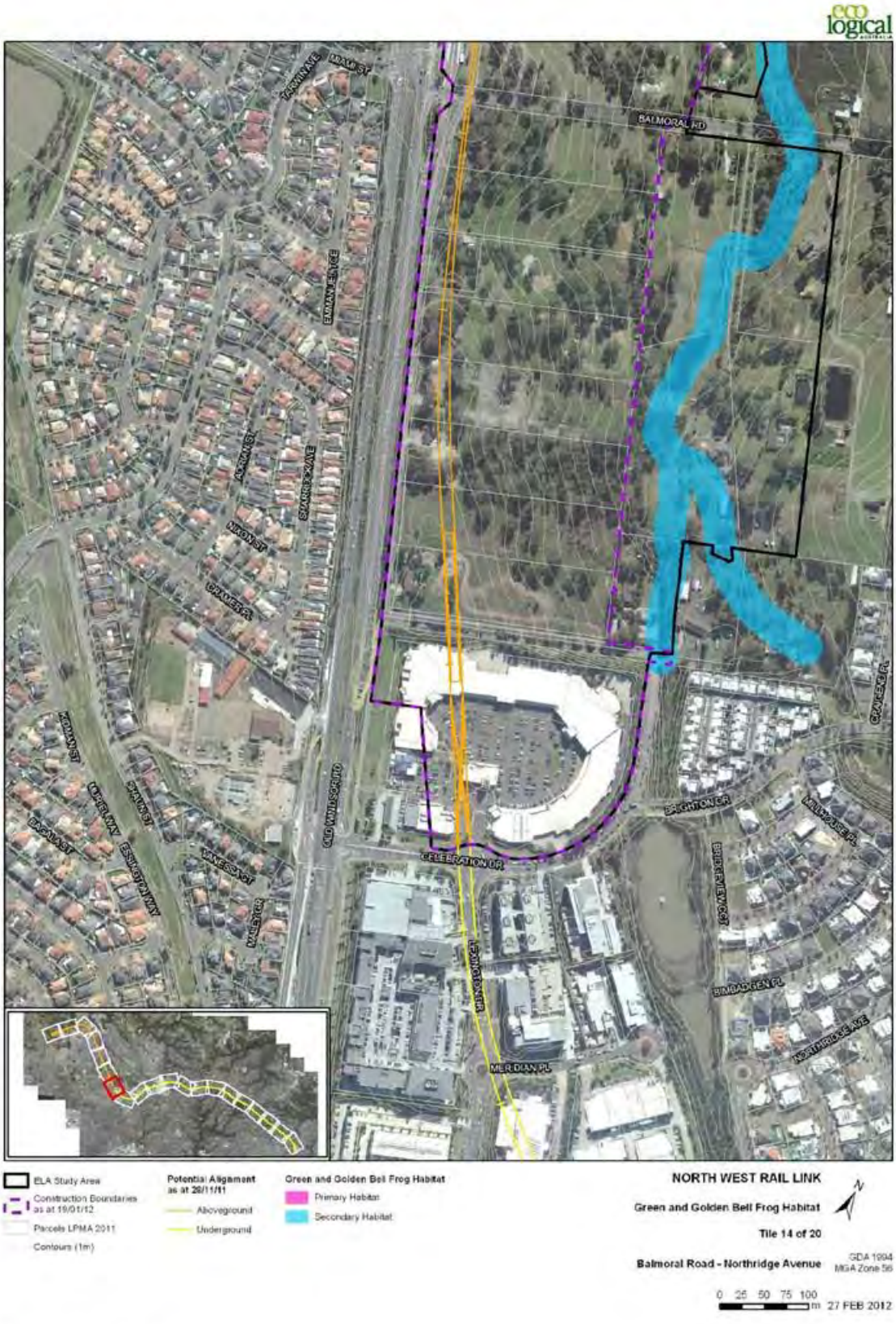
Whilst it is not possible to rule out an occasional presence of GGBF from time to time, it is unlikely that the species is present currently. The likelihood of occasional utilisation of the site is most reasonably determined by connectivity to the nearest known site. The extent of roads and other development between the subject land and the Riverstone distribution node, except via drainage lines, makes this consideration unlikely especially for the sites within the Caddies and Elizabeth Macarthur Creek component of the NWRL corridor.

G.4 Recommendations

Where possible, and cognisant of other rehabilitation priorities, GGBF habitat re-creation should be

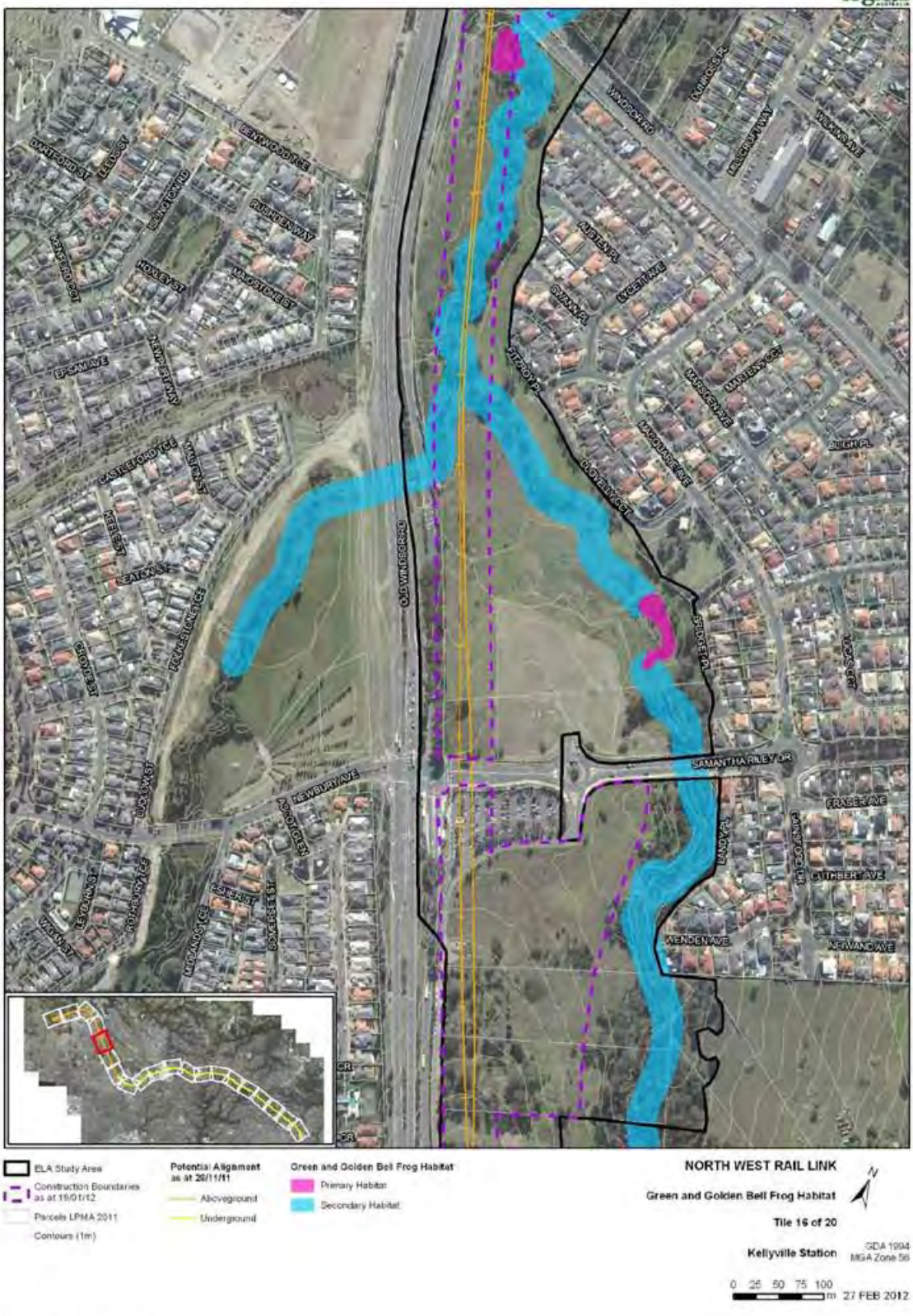
incorporated into rehabilitation of riparian areas impacted by the NWRL. OEH has prepared a Best Practice Guide to habitat construction (DECC 2007).

Appendix H Green & Golden Bell Frog Habitat Maps

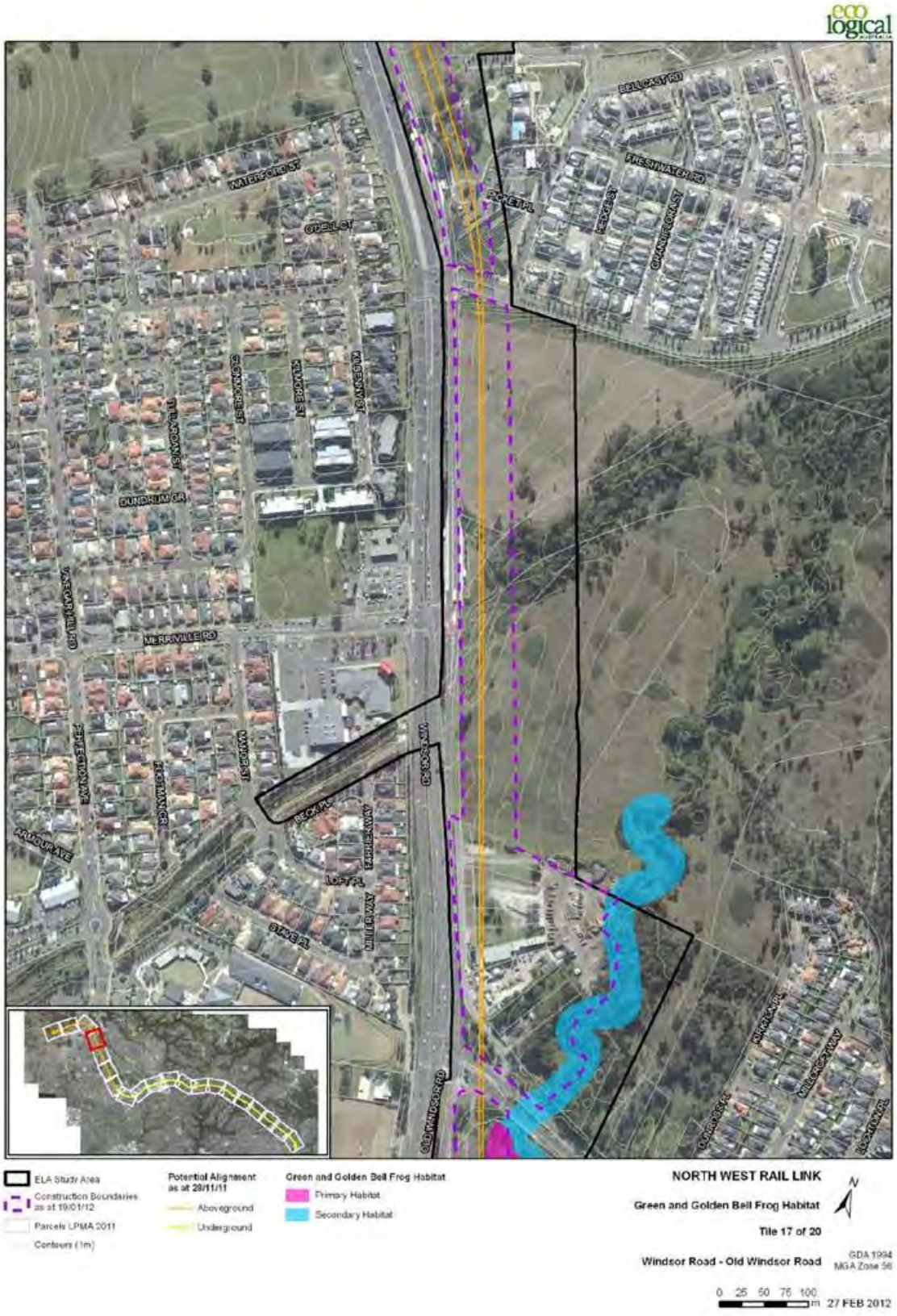


Balmoral Rd - GGBF

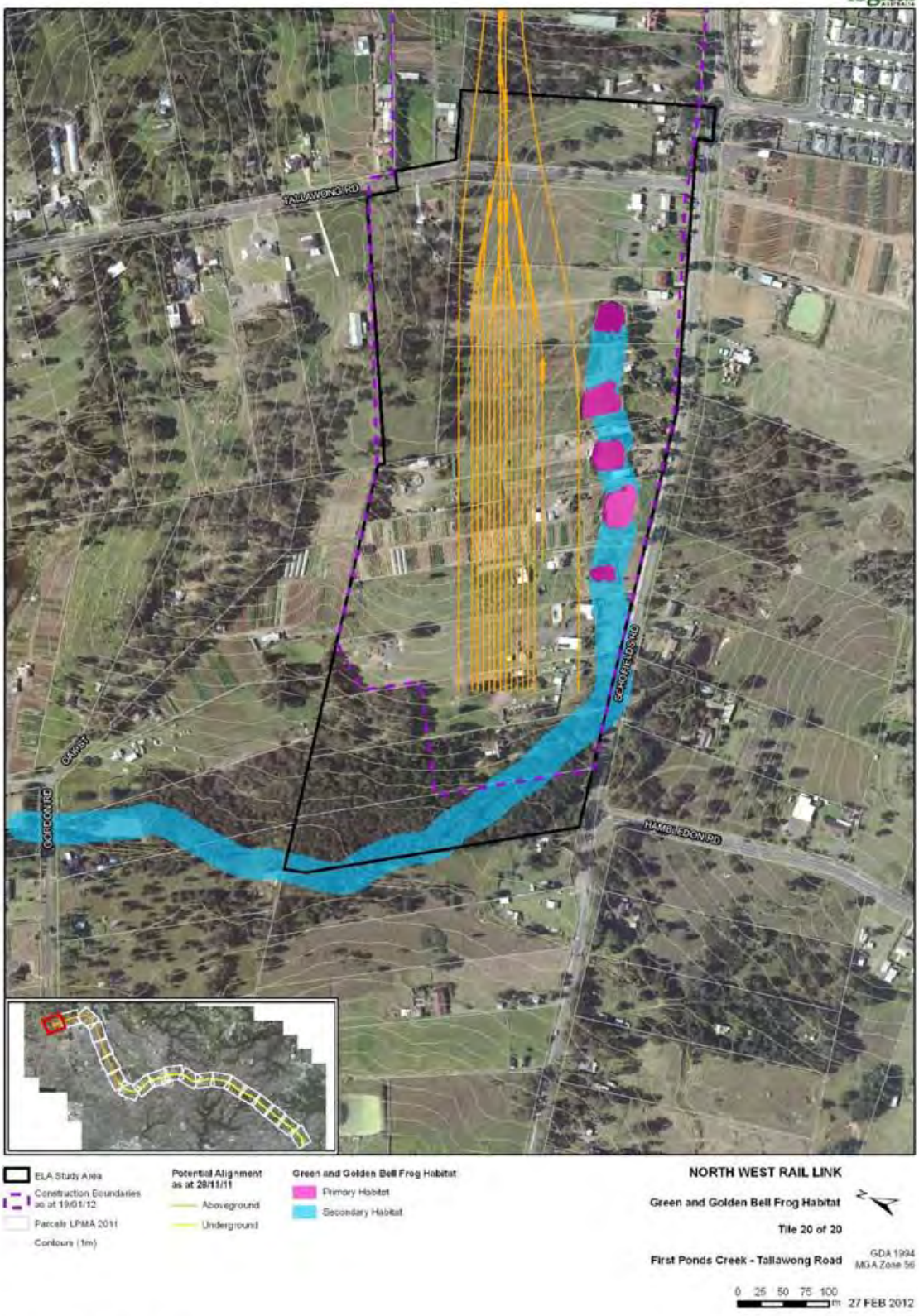
Old Windsor Road - GGBF



Kellyville - GGBF



Windsor Rd - GGBF



First Ponds creek - GGBF

Appendix I Opportunistic Sightings

Balmoral Road – Opportunistic Sightings

Kellyville – Opportunistic Sightings