Willoughby Natural Heritage Register - Chatswood-Roseville-Willoughby database (29/01/2016-13/09/2017) (including groups and individual outliers of former Blue Gum High Forest community)

KEY TO SCHEDULE

COLUMN	DESCRIPTION
1	STREET NAME (in alphabetical order)
2	CATEGORY = land description category (e.g. residential property; school; public reserve; road reserve; public right-of-way, etc.)
3	LOCATION = address (as applicable incl. front or rear garden, etc.)
4	DATE = survey/ assessment date
5	ITEM = scarp/ rock outcrops; core community; remnant community; tree group; single tree
6	EC = ecological communities and map units are in accordance with Benson & Howell (1994) in Cunninghamia 3(4) pp. 677-711, Royal Botanic Gardens, Sydney. The suburbs of Chatswood,
	Roseville and Willoughby retain remnant components of the former Blue Gum High Forest complex (BGHF/ 6b). BGHF is listed as a Critically Endangered Ecological Community (BCA 2016 & EPBCA 1999).
7	SPECIES = listed tree species (NOTE: 6-letter epithet/ identity code GENUS-SPECIES); refer to Key to Native Plant Species Schedule - Chatswood-Roseville-Willoughby
8	QTY = quantity (listed heritage tree/ item); n/a = not applicable for "remnant community"
9	AGE = estimated age of listed heritage tree/ item.
10	HT = estimated height (in metres)
11	CD = estimated canopy diameter (in metres)
12	COND = condition refers to overall health, vigour and structure of listed heritage tree/ item (good; fair; poor; very poor). Description as 'regrowth' is used as a general reference to mesic shift/
	level of disturbance and modification (incl. common tree/ shrub species such as Pittosporum undulatum, Glochidion ferdinandi, Homalanthus populifolius, etc).
13	RANK = ecological resilience ranking (1.0 = very high/ intact; 2.0 = high; 3.0 = medium/ fragmented; 4.0 = low/ some native ground layer present; 5.0 = highly modified)
	Note: ecological resilience ranking may vary for any given site (e.g. 2.5 = site varies between high level of integrity/ intactness with some canopy fragmentation and
	partial loss of understorey (2 = high) to highly modified natural community with cultivated native/ exotic garden and/or dominant weeds (5 = highly modified)
	For a detailed explanation of ecological resilience ranking see Willoughby Natural Heritage Register - Volume 1 (2002).
14	CONNECT = ecological connectivity/ level of canopy fragmentation (see WNHR, 2002)
15	NOTES include: legislative framework for protection and additional information describing listed items, context and description of remnant native components

STREET NAME	CATEGORY	LOCATION	DATE	ITEM	EC	SPECIES	QTY	AGE	HT	CD	COND	RANK	CONNECT	NOTES
									(m)	(m)				
CHATSWOOD														
Anderson Street	commercial	28 Anderson Street (cnr. Help Street)	13.12.16	single tree	6b	Angcos	1	?100-150+	20	20	good	5.0	isolated	TPO; Angcos- within planter bed; old growth multi-stemmed BGHF specimen; vigorous growth/ dense canopy; large specimen; 1943 aerial photo image shows canopy- 8m
Anderson Street	school/ college	35 Anderson Street St. Pius X College		J	6b	Angcos	1	50-60+	16	16	good	5.0	isolated	TPO; Angcos- planter bed in central courtyard; possibly BGHF old growth specimen; vigorous growth
Anderson Street	church group	37 Anderson Street (9A Wattle Lane)- St. Andrews (Chatswood) Presbyterian Church	13.12.16	single tree	6b	Synglo	1	?100-150+	20	20	good	5.0	isolated	TPO; Synglo- courtyard @ rear of church (western side of St. Andrew's Hall) old growth multi-stemmed BGHF specimen; vigorous growth/ dense canopy; large specimen; 1943 aerial photo image shows canopy- 7m
Anderson Street	church group	37 Anderson Street (9A Wattle Lane)- St. Andrews (Chatswood) Presbyterian Church	13.12.16	single tree	6b	Synglo	1	?100-150+	20	14	good	5.0	isolated	TPO; Synglo- planter bed adj. to car parking area/ Kirk Street cul-de-sac; old growth BGHF specimen; vigorous growth/ dense canopy; large specimen; 1943 aerial photo image shows canopy-8m diameter [Source: SIX maps, 2016]
Albert Avenue	residential	34 Albert Avenue- front garden	29.01.16	single tree	6b	Glofer	1	50-60+	9	9	fair	5.0	isolated	TPO; Glofer- adj. to front boundary/ driveway; mesic shift/ regrowth specimen; relatively open canopy/ poor
Archer Street	road reserve	grass verge adj. to 61 Archer Street (Albert Ave frontage)	29.01.16	single tree	6b	Glofer	1	50-60+	9	12	good	5.0	isolated	TPO; Glofer- on grass verge adj. to No.61 Archer Street (Albert Avenue frontage); mesic shift/ regrowth specimen; vigorous growth/ competition w. planted <i>Ficus benjamina</i>

Archer Street		63 Archer Street (cnr. Albert Ave/ Bertram St)		single tree	6b	Angcos	1	80-100+	25	32	good	5.0	isolated	TPO; Angcos- Chatswood Police Station: public open space/ mulched area adj. to corner Albert Avenue & Bertram Street; old growth multi- stemmed specimen of exceptional proportions and scale (1500mm DBH); vigorous growth/ dense canopy; prominent location and visually significant in this streetscape; protected during site development; significant remnant BGHF old growth specimen; highly modified/ no remnant native ground layer or understorey; 1943 aerial photo image shows Angcos canopy diameter (approx.12m) [Source: SIX maps. 2016]:
Archer Street	road reserve	public verge adj. to 107 Archer Street (cnr. Nicholson Street)	29.01.16	single tree	6b	Eucpil	1	60-80+	18	18	good	5.0	isolated	TPO; Eucpil- on public verge adj. to No.107 Archer Street; possibly planted; vigorous growth
Beauchamp Avenue	road reserve	planter bed within road reserve; adj. to Beauchamp Park (opp. 1 Beauchamp Avenue)	13.12.16	single tree	6b	Eucpil	1	?100-150+	25	18	good	5.0	fragmented	TPO; Eucpil- small planter bed; old growth BGHF specimen (~900mm DBH); vehicular damage/ wounding to lower trunk; some dead wood/ decline; 1943 aerial photo image shows canopy-9m diameter [Source: SIX maps, 2016]
Beauchamp Avenue	road reserve	planter bed within road reserve; adj. to Beauchamp Park (opp. 9 Beauchamp Avenue)	13.12.16	single tree	6b	Eucpil	1	?100-150+	25	18	fair	5.0	fragmented	TPO; Eucpil- small planter bed; old growth BGHF specimen (~900mm DBH); vehicular damage/ wounding to lower trunk; some dead wood/ decline; 1943 aerial photo image shows canopy-9m diameter [Source: SIX maps, 2016]
Beauchamp Avenue	road reserve	grass verge; adj. to Beauchamp Park & Oval (opposite 19 Beauchamp Avenue)	13.12.16	single tree	6b	Eucres	1	?100-150+	25	18	fair	5.0	isolated	TPO; Eucres- grass verge; old growth BGHF specimen; some dead wood/ decline; 1943 aerial photo image shows canopy- 9m diameter [Source: SIX mans 2016]

Beauchamp Avenue	public park	Beauchamp Park	13.12.16	tree group	6b	Angcos Eucpil Eucpan Eucres Synglo	n.d.	up to 100- 150+		up to 25m+	varies	4.5	fragmented	TPO; highly modified parkland/ landscaping incl. generic & local native planting (unknown provenance); significant remnant mixed group of BGHF native canopy species incl. many old growth specimens; no detailed survey of species/ age structure;1943 aerial photo image shows contiguous stand of BGHF community (mixed age structure)
Church Street	residential	34 Church Street- rear garden	29.01.16	single tree	6b	Synglo	1	?80-100+	14	14	good	5.0	isolated	TPO; Synglo- in rear garden adj. to boundary No.32 & 32A Church Street; old growth multi-stemmed BGHF specimen/ vigorous growth; exotic garden; 1943 aerial photo image shows sparse, open canopy (possibly pruned) [Source: SIX maps, 2016]
Crick Street	residential	28 Crick Street- rear garden	02.06.16	single tree	6b	Eucpan	1	60-80+	18	18	good	5.0	isolated	TPO; Eucpan- adj. to pool (new development); likely old growth BGHF specimen/ vigorous growth; exotic garden
Devonshire Street	residential	8 Devonshire Street- rear garden		single tree	6b	Synglo	1	?100-150+	22	18	poor	5.0	isolated	TPO; Synglo- in rear garden; v. old growth BGHF specimen; 1600mm DBH; exotic garden; rapid decline/ ext. defoliation (~30% total crown)/ vigorous fruiting/ pruning history; investigation could not confirm cause of decline; Postscript: continued decline/ ext. dead wood/ defolation (>70% total crown)/ removal 2018; 1943 aerial photo image shows canopy-19m diameter [Source: SIX maps, 2016]
Johnson Street	residential	14 Johnson Street- rear garden	29.01.16	single tree	6b	Synglo	1	?100-150+	18	22	good	5.0	isolated	TPO; Synglo- in rear garden adj. to boundary No.16 Johnson Street & No.30 Holland Street; old growth multistemmed BGHF specimen; vigorous growth/ dense canopy; exceptionally large specimen (local context) ~1000mm DBH; exotic garden; 1943 aerial photo image shows canopy- 10m diameter [Source: SIX maps, 2016]

Johnson Street	residential	22 Johnson Street- rear garden	29.01.16	single tree	6b	Synglo	1	?100-150+	14	14	good	5.0	isolated	TPO; Synglo- in rear garden (Hercules Street frontage); old growth multi-stemmed BGHF specimen; heavily pruned; ~1150mm DBH; exotic garden; 1943 aerial photo image shows canopy-10m diameter [Source: SIX maps,
Mowbray Road	residential	245 Mowbray Road- front garden	29.01.16	single tree	6b	Ficrub	1	50-60+	12	12	good	5.0	isolated	TPO; Ficrub- in front garden/ between driveway & boundary No.247 Mowbray Road; possibly older; vigorous growth/ dense canopy; exotic garden; mesic shift/ regrowth
Nicholson Street	road reserve	grass verge; adj. to Beauchamp Park & Oval	13.12.16	single tree	6b	Angcos	1	?100-150+	20	18	fair	5.0	fragmented	TPO; Angcos- grass verge; old growth BGHF multi-stemmed specimen; some dead wood; 1943 aerial photo image shows canopy- 18m diameter [Source: SIX maps, 2016]
Robinson Street	residential	1 Robinson Street- rear garden	29.01.16	single tree	6b	Synglo	1	?100-150+	15	14	good	5.0	isolated	TPO; Synglo- in rear garden on boundary to Stanley Street frontage (within high conc. boundary wall); old growth BGHF specimen; multistemmed/ 1X lopped main stem near base; ~1400mm DBH; vigorous growth/dense canopy; exotic garden; 1943 aerial photo image shows canopy- 8m diameter [Source: SIX maps, 2016]; Note: 2017 rapid decline/ 95% crown die-back; investigation could not confirm cause of decline.
Stanley Street	residential	1 Stanley Street- rear garden	29.01.16	single tree	6b	Synglo	1	80-100+	12	14	good	5.0	isolated	TPO; Synglo- in rear garden/ courtyard; old growth BGHF specimen/ vigorous growth; exotic garden; 1943 aerial photo image shows canopy diameterapprox.9m [Source: SIX maps, 2016]

Stanley Street	residential	61 Stanley Street- front (west) garden	29.01.16	tree group	6b	Synglo	1	80-100+	12	10	good	5.0	isolated	TPO; Synglo- in west garden/ paved courtyard on front boundary (damaged wall) adj. to public verge/ footpath; old growth multi-stemmed BGHF specimen/ vigorous growth; exotic garden; 1943 aerial photo image shows canopy- 8m diameter [Source: SIX
Stanley Street	residential	61 Stanley Street- north garden	29.01.16	tree group	6b	Synglo	1	?100-150+	12	15	good	5.0	isolated	TPO; Synglo- in north garden adj. to boundary No.38 Church Street; old growth multi-stemmed BGHF specimen/ vigorous growth; exotic garden; 1943 aerial photo image shows mature canopy- 14m diameter [Source:
ROSEVILLE Darling Street	road reserve	grass verge adj. to 24	20 01 16	single tree	6b	Angcos	1	?80-100+	18	16	good	5.0	isolated	TPO; Angcos- on grass verge adj. to
burning outcor	Toda Todo Vo	Darling Street	25.01.10	Single tree		741g000	'	100 100	10	10	good	0.0	issiated	No.24 Darling Street; old growth BGHF specimen/ vigorous growth; some pruning for overhead power-lines; 1943 aerial photo image shows canopy -7m diameter [Source: SIX maps, 2016]
WILLOUGHBY (ov	er page)													
Mowbray Road	road reserve	grass verge adj. to entry/ St. Stephen's Anglican Church	29.01.16	tree group	6b	Synglo	1	?100-150+	15	18	fair	4.5	isolated	TPO; Synglo- on grass verge adj. to entry/ driveway St. Stephen's Anglican Church; old growth BGHF specimen (1150mm DBH)/ some dead wood (15%)/ decline in vigour; part of remnant old growth Synglo group (3X trees- possibly same tree/ lignotuber regrowth) in this location (20m combined canopy diam.); some remnant native ground layer at bases (incl. Entmar, Oplaem, Dicrep, Austen); exotics/ dom. weeds; 1943 aerial photo image shows similar canopy diameterapprox.16m [Source: SIX maps, 2016]; Note: In 1943 (prior to subdivision) this group was part of a significant remnant BGHF cluster on adjoining church

Mowbray Road	road reserve	grass verge adj. to entry/ St. Stephen's Anglican Church	29.01.16	tree group	6b	Synglo	1	80-100+	9	7	good	4.5	isolated	TPO; Synglo- on grass verge adj. to entry/ driveway St. Stephen's Anglican Church; old growth BGHF specimen; some dead wood/ vigorous growth; part of remnant old growth Synglo group (3X trees- possibly same tree/ lignotuber regrowth) in this location (20m combined canopy diam.); see above details
Mowbray Road	road reserve	grass verge adj. to entry/ St. Stephen's Anglican Church	29.01.16	tree group	6b	Synglo	1	?100-150+	15	12	good	4.5	isolated	TPO; Synglo- on grass verge adj. to entry/ driveway St. Stephen's Anglican Church; old growth BGHF specimen (950mm DBH)/ some dead wood/ vigorous growth & relatively dense crown; part of remnant old growth Synglo group (3X trees- possibly same tree/ lignotuber regrowth) in this location (20m combined canopy diam.); see above details
Mowbray Road	church group	211 Mowbray Road - St. Stephen's Anglican Church- residence/ front garden	29.01.16	tree group	6b	Synglo	1	?100-150+	10	8	fair	5.0	isolated	TPO; Synglo- St. Stephen's Anglican Church (211 Mowbray Road)- within fenced residence; front garden/ on open lawn; old growth multi-stemmed (2) at base; BGHF specimen/ ext. dead wood (25%)/ decline in vigour; part of remnant old growth Synglo group; exotic garden; 1943 aerial photo image shows larger, dense canopy-approx.15m diameter [Source: SIX maps, 2016]; Note: In 1943 (prior to subdivision) this tree was part of a significant remnant BGHF cluster on
Mowbray Road	church group	211 Mowbray Road - St. Stephen's Anglican Church- residence/ rear garden	29.01.16	tree group	6b	Synglo	1	80-100+	14	11	good	5.0	isolated	TPO; Synglo- St. Stephen's Anglican Church (211 Mowbray Road)- within fenced residence; rear garden/ adj. to tennis courts; old growth BGHF specimen/ vigorous growth; part of remnant old growth Synglo group (see

Mowbray Road	church group	211 Mowbray Road - St. Stephen's Anglican Church- residence/ rear garden		tree group	6b	Synglo	1	80-100+	15	10	good	5.0	isolated	TPO; Synglo- St. Stephen's Anglican Church (211 Mowbray Road)- within fenced residence; rear garden/ adj. to tennis courts; old growth BGHF specimen/ vigorous growth; part of remnant old growth Synglo group (see
Stephen Street	residential	7 Stephen Street- rear garden	29.01.16	single tree	6b	Synglo	1	?100-150+	15	15	good	5.0	isolated	TPO; Synglo- in rear garden/ lawn area adj. to rear boundary Nos.8 & 10 Matheson Avenue; old growth multistemmed BGHF specimen; vigorous growth/ dense canopy; exotic garden; 1943 aerial photo image shows canopy-9m diameter [Source: SIX maps, 2016]
Stephen Street	residential	8 Stephen Street- front garden	29.01.16	single tree	6b	Synglo	1	80-100+	14	9	good	5.0	isolated	TPO; Synglo- in front garden adj. to front boundary & driveway; old growth BGHF specimen; vigorous growth/ some past pruning; exotic garden; 1943 aerial photo image shows similar canopy diameter [Source: SIX maps, 2016]; Note: In 1943 (prior to subdivision) this tree was part of a significant remnant BGHF cluster (6-10
Stephen Street	residential	10 Stephen Street- rear garden	29.01.16	single tree	6b	Synglo	1	?100-150+	14	18	good	5.0	isolated	TPO; Synglo- in rear garden/ lawn area adj. to boundary No.211 Mowbray Road (tennis courts) & No.8 Stephen Street; old growth BGHF specimen; multi-stemmed (2) at base; vigorous growth/ dense canopy; exotic garden; 1943 aerial photo image shows mature canopy- 12m diameter [Source: SIX maps, 2016]; Note: In 1943 (prior to subdivision) this tree was part of a significant remnant BGHF cluster (6-10 Stephen Street)