'Jardins' Seniors Living Frenchs Forest | Landscape S.455 Package

5 Skyline Place, Frenchs Forest NSW 2086

FRENCHS FOREST ROAD EAST

Site plan - Extent of Landscape DA Works

Drawing register:

Drawing No.:	Drawing title:	Issue:
2046-01	Titlesheet: Drawing Register, General Notes & Extent of Works Plan	1
2046-02	Design Statement, Design Principles, Location Plan	1
2046-04	Overall Site Plan	1
2046-06	Landscape S.455 Plan 1 of 2 (Groundfloor)	1
2046-07	Landscape S.455 Plan 2 of 2 (Roof terrace & green roof)	1
2046-08	Elevation A, Elevation B	1
2046-09	Sectional Elevation C, NSW RFS Asset Protection Zone Requirements	1
2046-10	Landscape Area Plan, Deep Soil Plan	1
2046-11	Planting S.455 Plan 1 of 2 Groundfloor building surrounds	1
2046-12	Planting S.455 Plan 2 of 2 Buffer zones	1
2046-13	Plant Schedule 1 of 2 Groundfloor Building Surrounds, Green Roof & Roof Terrace	1
2046-14	Plant Schedule 2 of 2 Buffer zones	1
2046-15	Existing Tree Canopy Cover Diagram Proposed Tree Canopy Cover Diagram	1

Project information:

Client:	Platino Properties
Site:	5 Skyline Place, Frenchs Forest NSW 2086 SP49558
LGA:	Northern Beaches Council
Landscape architect:	Paddock Landscape Architects
Architect:	PA Studio
Planner:	Platino Properties
Arborist:	Naturally Trees
Surveyor:	Chadwick Cheng Consulting Surveyors
Traffic consultant:	Varga Traffic Planning
Civil engineer:	ING Consulting Engineers
Access consultant:	Code Performance
Bushfire consultant:	Building Code & Bushfire Hazard Solutions
Geotechnical engineer:	Douglas Partners
Operational PoM:	Zinnia
Sustainability consultant:	Northrop

General notes:

- + Not for construction or pricing.
- + Subject to detailed design documentation.
- + Refer to 'PA Architects' documentation for all building works.
- + Refer to engineer documentation for all external services, including stormwater drainage, lighting, hydraulic, mechanical
- + All landscape structures subject to detailed design and engineering design, including fences, walls, pavements, water ponds, balustrades, furniture, shade structures, handrails, signage etc.
- + Planting subject to availability at time of tender and construction.
- $+ Construction \ works \ to \ include \ sediment \ and \ erosion \ control \ fencing \ along \ lower \ boundary \ to \ ensure \ all \ sediment \ runoff$ contained on-site.



Design Statement

'Jardins Frenchs Forest' will create an active and vibrant senior's community within a lush bushland setting.

An internal shared-use laneway (Skyline Lane) provides a centralised 'street address' for the precinct within a high-quality public realm. This shared-use plaza includes a drop-off/pick-up area and short-term parking for residents and visitors.

The design incorporates a pedestrian circulation network that does not rely on the covered curtilage of the ground floor buildings. Rather, the primary entry to the precinct is centralised adjacent to the driveway entry, via a generous width, pedestrian orientated, open to the sky 'street' that leads through to the central entry plaza and shared-use laneway. From here, residents and visitors can navigate to the clearly defined building entries located around the central lawn. The area adjacent to building entries has been kept deliberately open and decluttered to ensure clear sightlines are maintained throughout the precinct, particularly from the precinct entry and 'entry plaza'. All building entries adjoin the central public open space. Site through-links provide secondary access from Skyline Place and also to Frenchs Forest Road East along the northern boundary.

A wayfinding strategy has been developed in conjunction with the revised landscape design (refer to MAAT documentation). The wayfinding strategy information is organized in a hierarchical manner to assist in creating a legible wayfinding experience, integrated through positioning and materials with the precinct landscape. Where possible sign forms will be applied or attached directly to the building form, or if freestanding, located in garden beds to keep pathways clear. These will be augmented by interpretive and placemaking opportunities that animate the residents experience and usage of the central courtyard and broader public domain. These include pedestrian-scaled placemaking interventions, such as feature sculptural shade structures, public domain furniture or play spaces, in addition to the use of feature vegetation, such as the 'palm groves' located adjacent to active use areas.

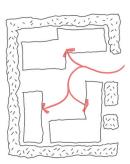
The central courtyard and garden spaces will include a mixture of passive and active use destinations that will activate the edges of the central lawn area and contribute to the liveability and amenity of the precinct. The central courtyard area is decluttered, with activity located towards the edges. This includes outdoor fitness stations, a small play space and a pathway circuit around the lawn. Additional communal spaces for residents are located within the upper terrace and will include external spaces to compliment the internal common areas. Groundfloor employment generating uses, will activate the building surrounds.

The design enhances the bushland setting, provided by the Garigal National Park, the Wakehurst Parkway wildlife corridor and the Frenchs Forest landscaped road setbacks, through endemic buffer planting areas within a generous, deep soil setback along the western, southern and eastern boundaries. The species selection has been derived from the Northern Beaches Council native species list for the Frenchs Forest Ward. These planted buffer zones include the retention of significant canopy trees.

The bushland character extends through to the central courtyard with large native canopy trees, clusters of native palms and understorey planting, grounding the development within its bushland setting. The mixture of tall native palm groves and groupings of large canopy trees will 'green' the central courtyard and provide scale and separation between the new apartment buildings.

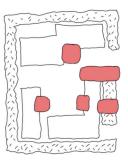
The planting within direct proximity to the building surrounds and communal terraces is residential in scale and includes a variety of robust, low maintenance indigenous and non-invasive exotics that will provide interest through form. texture and variation in seasonal colour.

Design Principles



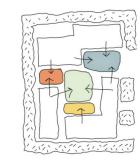
Provide legible access:

- + Provide a centralised shared use 'street address' for the precinct within a high-quality public realm.
- + Establish a legible pedestrian circulation network that connects the laneway/entry plaza to the broader public realm and building



Ensure legible entries:

- + Ensure all building entries are clearly defined and adjoin a public open space.
- + Ensure clear sightlines are maintained between the precinct entry, 'entry plaza' and the building entries.



Provide a mixture of activity:

- + The central courtyard and garden spaces are essential to the liveability and amenity of the precinct and should provide a mixture of uses that cater for the residents and visitors.
- + Provide a variety of passive and active use destinations that will contribute to a finer grain public domain.



Enhance the bushland setting:

- + Enhance the bushland setting provided by the Garigal National Park, the Wakehurst Parkway wildlife corridor and the Frenchs Forest landscaped road setbacks by providing endemic planting in deep soil setbacks at boundaries.
- + Provide a mix of internal garden areas at the residential scale, including productive gardens.

Location Plan

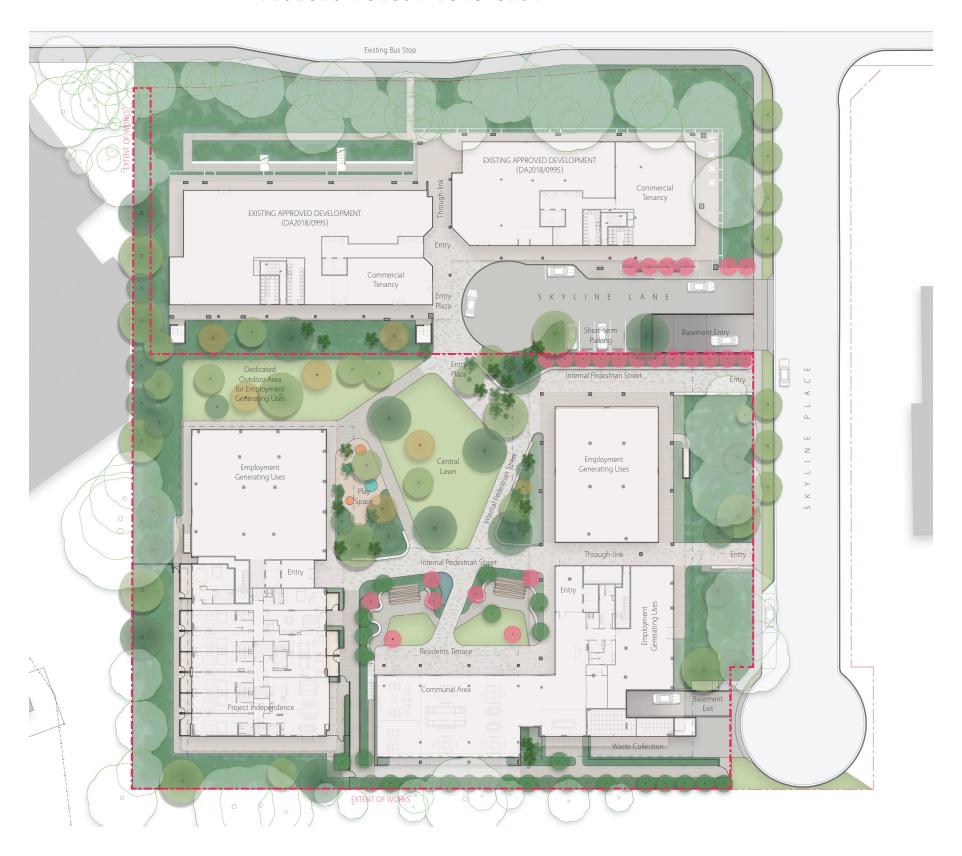


Legend:

Project site.

Existing commercial and retail.

IIII Main arterials & transport routes.



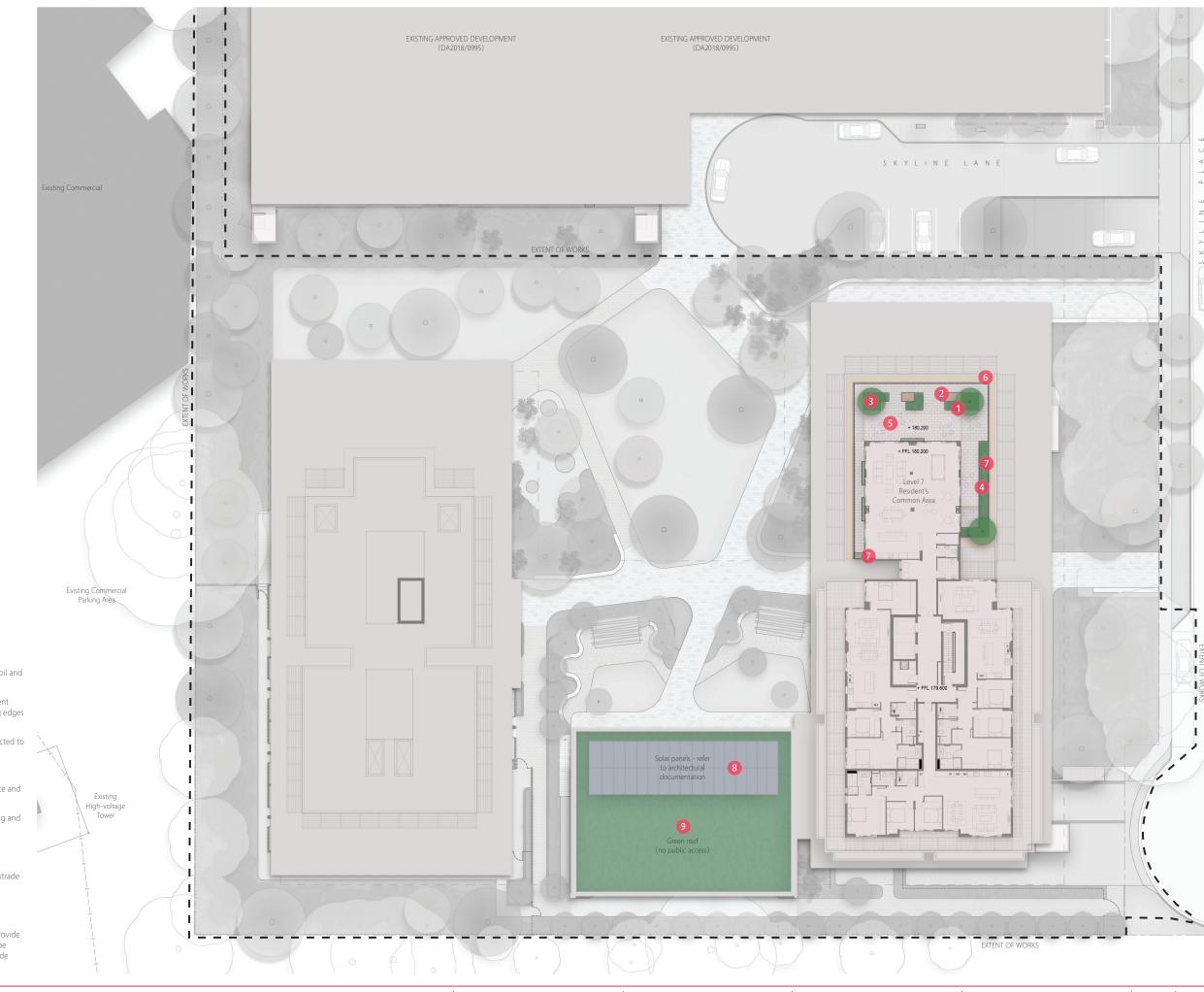
Legend:

- Extent of landscape works.
- - Property boundary
- Proposed levels, to be read in conjunction with architectural documentation.
- New mass planted garden areas with organic soil and mulch (refer to planting plans 2046-11 and 2046-12).
- New grassed areas with turf underlay (refer to planting plans 2046-11).
- Pavement Type 1 (internal pedestrian street): large format stone unit paving on mortar bedding and reinforced concrete base slab. Light coloured stone.
- Pavement Type 2 (secondary pedestrian pathways): large format stone unit paving on mortar bedding and reinforced concrete base slab. Darker coloured stone
- Pavement Type 3 (secondary pedestrian pathways): cobble stone paving on mortar bedding and reinforced concrete base slab. Darker coloured stone.
- Pavement Type 4 (service areas): reinforced concrete with lightly exposed aggregate finish and full depth coloured pigment.
- Primary pedestrian entry to the precinct. A wide open-to-the-sky pathway with avenue of feature flowering trees. Low concrete seating delineate entry along length. Precinct signage and wayfinding signage included at entry.
- Entry Plaza a large open public realm that allows for an internal 'street address'. The Entry Plaza includes large canopy shade trees and a palm grove located within high quality public realm. Public domain furniture, including feature seating, bike racks and signage.
- Shared-use internal laneway 'Skyline Lane' provides an internal 'street address' and allows for drop-off, pick-up, short-term parking and emergency services access. Area finish with stone unit paving. Area not part of DA works - already approved under an existing DA approval (DA2018/0995).
- Existing basement access to cater for both entire precinct. Area not part of DA works - already approved under an existing DA approval (DA2018/0995).
- Seating Walls 1: Feature precast concrete curved seating elements, lightcoloured finish to contrast paving, planting and to form a feature within the landscape. Walls provide seating and also retain garden areas.
- Large open central lawn area provides a central green space for residents and visitors for passive and active recreation. Large native canopy shade trees and deciduous trees scattered throughout lawn.
- Informal play space with lush garden surrounds. Area includes proprietary play equipment (such as swings, rocker, spinners) in addition to informal nature play elements.
- Active recreation hubs (outdoor fitness stations) located within a paved public area amongst palm groves.
- Lush planting to provide a green edge to the central courtyard space and seating around the edges.
- Dedicated outdoor use area for adjacent groundfloor employment generating uses.
- Bike racks located within publicly accessible areas.
- Residents upper terrace, including a large paved outdoor area and smaller gathering areas. Area provides for a flexible, multi-use space for residents.
- Feature shade structure shelters within the residents communal area. including seating and table settings. Shelter structures form provide a placemaking element within the precinct - a place to meet other residents or visitors.
- Entry to Project Independence.
- 19 Entry to building lobbies.
- New short-term drop-off and pickup bays along Skyline Place adjacent to the secondary building access and through-link to the courtyard.
- Short-term parking bays within Skyline Lane. Area not part of DA works already approved under an existing DA approval (DA2018/0995).
- Fence Type 1: 1.8m height metalwork fence along western and southern $\,$ boundary and to enclose gardens.
- 23 Existing trees to be retained - refer to arborist report.
- New planting to buffer zones along western, southern and eastern boundaries. Planting selection to utilise endemic species.
- 25 Waste collection and loading bay.
- 26 Extent of basement under courtyard (shown yellow dashed).
- 27 OSD tank located in basement - refer to engineer documentation.





Platino Properties



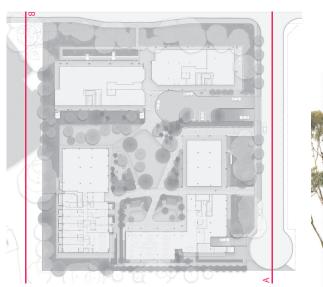
Legend:

- Extent of landscape works.
- - Property boundary.

156.500 Proposed levels, to be read in conjunction with architectural documentation.

- New mass planted garden areas in podium planters, with organic soil and mulch (refer to planting plan 2046-11).
- Raised podium planters to cater for productive plants and permanent gardens. Planters to be 1200mm height and form balustrade along edges of terrace.
- 2 Timber seating platforms incorporated within podium planters directed to the northern view and provide more private seating areas.
- 3 Small feature shade trees provide shade and amenity to terrace.
- Permanent planting areas provide gardens for the communal terrace and may include areas for productive gardens.
- Pavement Type 2: large format stone unit paving on mortar bedding and reinforced concrete base slab. Light coloured stone.
- 6 Gravel mulch to non-trafficable rooftops.
- Raised podium planters along edges of private terraces to cater for permanent gardens. Planters to be 1200mm height and form balustrade along edges of terrace.
- 8 Solar panels above window structure refer to architectural documentation.
- Green roof with a mixture of robust groundcovers and grasses to provide a green outlook from surrounding apartments. Green roof will not be publicly accessible (only maintenance access). Green roof will include 300mm depth of light-weight planting media.

r issue:



Key Plan

Scale: nts



Elevation A - Skyline Place

Scale: 1:200 @A1



Elevation B

Scale: 1:200 @A1

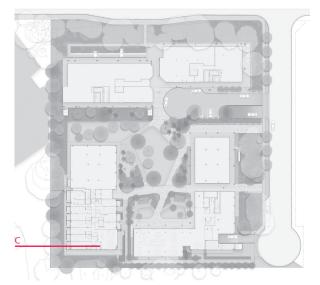


Issue: Date: Reason: 1 08.11.23 S.455 Submission

roject: 'Jardins' Frenchs Forest 5 Skyline Place Frenchs Forest NSW 2086 lient: Platino Properties

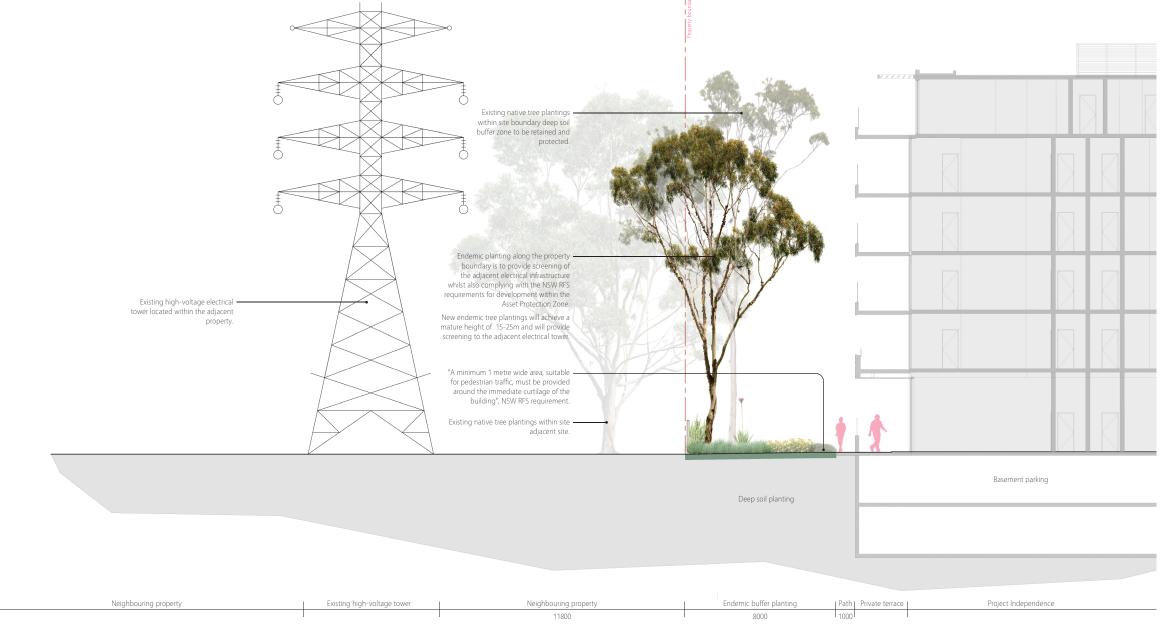
Title: Elevation A Elevation B

2046-08



Key Plan

Scale: nts



Sectional Elevation C

Scale: 1:100 @A1

NSW Rural Fire Service (RFS) Asset Protection Zone Requirements:

From the start of building works, and in perpetuity to ensure ongoing protection from the impact of bush fires, the entire property must be managed as an inner protection area (IPA) in accordance with the requirements of Appendix 4 of Planning for Bush Fire Protection 2019. When establishing and maintaining an IPA the following requirements apply:

- + tree canopy cover should be less than 15% at maturity;
- + trees at maturity should not touch or overhang the building;
- + lower limbs should be removed up to a height of 2m above the ground;
- + tree canopies should be separated by 2 to 5m;
- + preference should be given to smooth barked and evergreen trees;
- + large discontinuities or gaps in vegetation should be provided to slow down or break the progress of fire towards buildings;
- + shrubs should not be located under trees;
- + shrubs should not form more than 10% ground cover;
- + clumps of shrubs should be separated from exposed windows and doors by a distance of at least twice the height of the vegetation;
- $\mbox{+}$ grass should be kept mown (as a guide grass should be kept to no more than 100mm in height); and
- + leaves and vegetation debris should be removed.

Landscaping Assessment:

level (i.e. leaf litter);

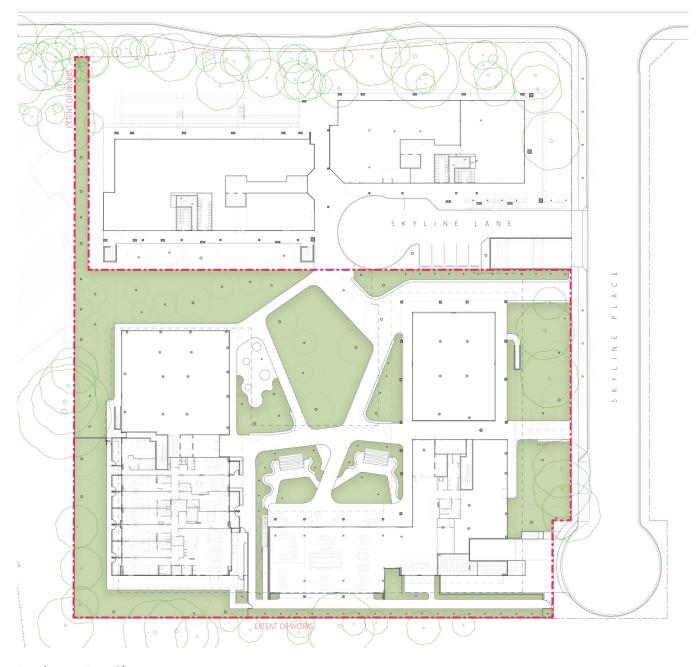
Landscaping within the required asset protection zone must comply with Appendix 4 of Planning for Bush Fire Protection 2019. In this regard, the following principles are to be incorporated:

- $\,$ + A minimum 1 metre wide area, suitable for pedestrian traffic, must be provided around the immediate curtilage of the building;
- + Planting is limited in the immediate vicinity of the building;
- + Planting does not provide a continuous canopy to the building (i.e. trees or shrubs are isolated or located in small clusters);
- + Landscape species are chosen to ensure tree canopy cover is less than 15% (IPA), and less than 30% (OPA) at maturity and trees do no touch or overhang buildings;
- + Avoid species with rough fibrous bark, or which retain/shed bark in long strips or retain dead material in their canopies;
- + Use smooth bark species of trees species which generally do not carry a fire up the bark into the crown; + Avoid planting of deciduous species that may increase fuel at surface/ ground

- + Avoid climbing species to walls and pergolas;
- + Locate combustible materials such as woodchips/mulch, flammable fuel stores away from the building;
- + Locate combustible structures such as garden sheds, pergolas and materials such as timber garden furniture away from the building; and
- + Low flammability vegetation species are used.

Extracted from the NSW Rural Fire Service Integrated Development Application (DA2021-0212 (CNR-19692)) Referral Response, dated 17.05.2021.





Landscape Area Plan

Scale: 1:400 @A1

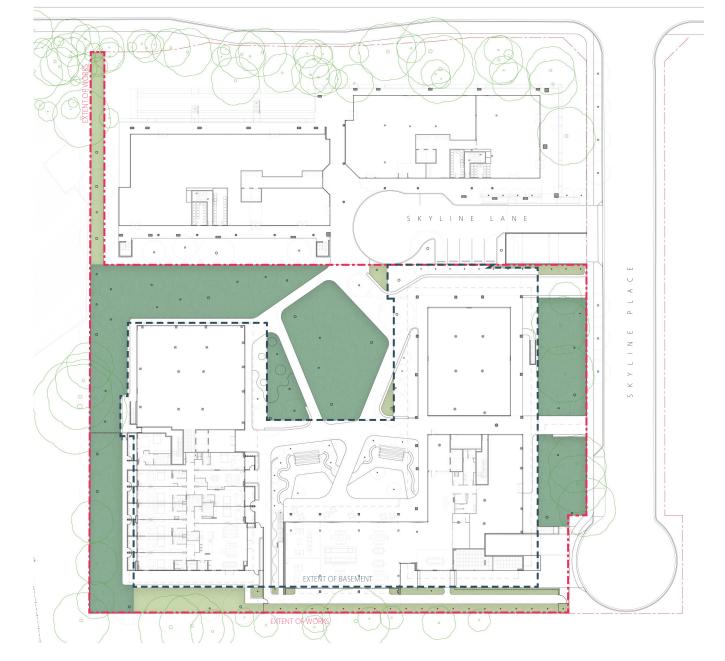
DCP landscape area requirements: 33.3% of total site area. Site area = $7.811.0 \text{ m}^2$. Required = $2,603.4 \text{ m}^2$

Total provided = 3,062.0 m² (39.2%)

DCP Requirements

- 1. The required minimum area of landscaped open space is shown on DCP Map Landscaped Open Space and Bushland Setting. To measure the area of landscaped open space:
- a) Driveways, paved areas, roofed areas, tennis courts, car parking and stormwater structures, decks, etc, and any open space areas with a dimension of less than 2 metres are excluded from the calculations are successful.
- b) The water surface of swimming pools and impervious surfaces which occur naturally such as rock outcrops are included in the calculation;
- c) Landscaped open space must be at ground level (finished); and
- d) The minimum soil depth of land that can be included as landscaped open space is 1 metre.

LEP Definition: Landscaped area means a part of a site used for growing plants, grasses and trees, but does not include any building, structure or hard paved area.



Deep Soil Plan Scale: 1:400 @A1

ADG deep soil requirements: 15% of total site area.

Site area = $7,811.0 \text{ m}^2$. Required = $1,171.6 \text{ m}^2$

Total provided >6m width = 1,940.0 m² (24.8%) Total provided <6m width =458.0 m² (5.8%)

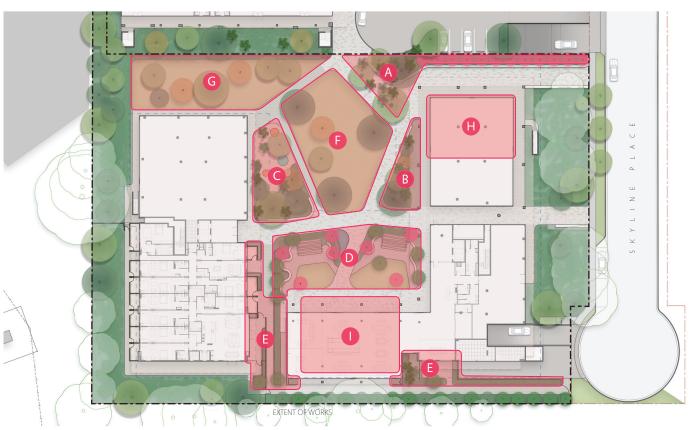
Total deep soil areas provided = 2,398.0 m² (30.6%)

ADG Deep Soil Requirements (objective 3E-1, page 61): "Minimum 7% of site area for sites greater than 1,500 m², minimum 6m dimension".

"On some sites it may be possible to provide larger deep soil zones, depending on the site area and context = 15% of site area."







Area A

The primary pedestrian arrival into the precinct.
The garden areas include an avenue of feature
deciduous trees leading to the entry plaza - a
public domain with native palms and trees.

Plant Code:	Quantity:
Groundcovers + C	limbers:
CAS gla CI	18
CHR api	15
DIC arg SF	25
DIC rep	30
GRE lan MT	15
SEN man	15
VIO hed	30
ZEP can	35
Grasses, Ferns + Br	oad-leaved:
ALC imp SP	9
ANI BG	15
ART cir	12
ASP aus	9
BLE gib	15
CLI min	12
DIA cae LJ	35
DOO asp	12
DOR exc	7
FIC nod	12
HEL psi A	12
LIR mus EG	45
LOM Ion T	35
MOL cap	28
POA lab E	24
THE aus	24
Shrubs + Screening	g:
BAN rob	12
COR alb	15
HAR vio	15
RHA ind SM	24
TEL spe	7
WES fru GB	24
XAN aus	7
Trees + Palms:	-
ANG cos	2
ARC cun	4
COR cit	2
HOW for	4
LAG ind T	12
LIV aus	8

Area B

Garden area to the public courtyard surrounds.

Plant Code:	Quantity:
Groundcovers + Cl	imbers:
ACT hel	7
CAS gla CI	15
CHR api	25
DIC arg SF	20
DIC rep	30
GRE lan MT	22
HIB sca	15
SEN man	12
VIO hed	30
ZEP can	28
Grasses, Ferns + Br	oad-leaved:
ANI BG	9
ART cir	7
CLI min	7
DIA cae LJ	25
DOR exc	3
FIC nod	12
IMP cyl	15
LIR mus EG	15
LOM Ion T	21
POA lab E	18
THE aus	15
Shrubs + Screening	g:
BAN obl	5
BAN rob	5
COR alb	7
EPA lon	5
GRE lin	3
HAR vio	7
RHA ind SM	7
TEL spe	3
WES fru GB	15
XAN aus	5
Trees + Palms:	
ARC cun	3
EUC hae	1
HOW for	3
LAG ind T	2
LIV aus	6

Area C

Garden area to the public courtyard surrounds and playspace surrounds. Lush gardens with native palms, shade trees and low understorey to maintain sight lines.

to maintain signt lines.		
Plant Code:	Quantity:	
Groundcovers + Climbe	Prs:	
ACT hel	9	
CAS gla CI	10	
CHR api	15	
DIC arg SF	10	
DIC rep	25	
GRE lan MT	15	
HIB sca	9	
SEN man	26	
VIO hed	25	
ZEP can	15	
Grasses, Ferns + Broad-	leaved:	
ANI BG	6	
ASP aus	5	
BLE gib	7	
DIA cae LJ	25	
DOO asp	7	
DOR exc	7	
FIC nod	9	
LOM Ion	7	
LOM Ion T	25	
MOL cap	5	
POA lab E	25	
THE aus	9	
Shrubs + Screening:		
BAN obl	3	
BAN rob	3	
COR alb	5	
HAR vio	5	
TEL spe	3	
WES fru GB	20	
XAN aus	5	
Trees + Palms:		
ANG cos	1	
ARC cun	1	
COR cit	1	
HOW for	2	
LIV aus	6	
TRI lau L	1	
	1	

Area D

nds Lush garden to the resident's communal terrace the area. A mixture of native and non-evasive exotics within a residential character and scale.

Plant Code:	Quantity:
Groundcovers + C	imbers:
ACT hel	7
CAS gla CI	20
CHR api	20
DIC arg SF	25
DIC rep	20
GRE lan MT	15
HIB sca	12
SEN man	20
VIO hed	25
ZEP can	30
Grasses, Ferns + Br	oad-leaved:
ALC imp SP	6
ART cir	12
BLE gib	18
CLI min	24
CTE set	16
DIA cae LJ	20
DOO asp	12
DOR exc	6
FIC nod	12
HEL psi A	22
LIR mus EG	35
LOM Ion T	18
MOL cap	30
POA lab E	15
Shrubs + Screening	g:
ALP zer	12
COR alb	8
HAR vio	8
RHA ind SM	10
SYZ aus R	4
VIB odo EL	4
WES fru GB	28
XAN aus	5
Trees:	
ELA eum	3
LAG ind T	7
TRI lau I	4

Area E

Inal terrace Lush gardens to the shaded building surrounds, vasive primarily located within podium planters. and scale.

Plant Code:	Quantity:
Groundcovers + Climbers:	
CAS gla CI	15
DIC arg SF	45
DIC rep	45
HIB sca	12
SEN man	25
VIO hed	45
ZEP can	48
Grasses, Ferns + Br	oad-leaved:
ALC imp SP	12
ALO mac	12
ART cir	22
ASP aus	15
BLE gib	30
CLI min	30
CTE set	24
DIA cae LJ	45
DOO asp	30
FIC nod	28
HEL psi A	30
LIR mus EG	30
LOM Ion T	24
MOL cap	35
Shrubs + Screening	g:
ALP zer	25
RHA ind SM	25
SYZ aus R	20
THY max	15
VIB odo EL	20
Trees + Palms:	
ARC cun	2
ELA eum	4
HOW for	2

Area F

rounds, Large central lawn area with canopy shade trees and deciduous trees within the lawn.

Plant Code:	Quantity:
Trees:	
ANG cos	2
COR cit	1
EUC hae	1
GIN bil	1
TRI lau L	1

Area G

Lawn area with large shade trees and garden surrounds. A native-centric, hardy species mix to blend with the adjacent buffer planting zones.

Plant Code:	Quantity:
Groundcovers + Cli	imbers:
ACT hel	12
CAS gla CI	12
DIC arg SF	15
DIC rep	25
GRE lan MT	18
HIB sca	15
SEN man	12
VIO hed	25
ZEP can	15
Grasses, Ferns + Bro	oad-leaved:
ANI BG	7
ART cir	7
BLE gib	7
DIA cae LJ	45
DOO asp	12
DOR exc	5
FIC nod	28
IMP cyl	60
LIR mus EG	22
LOM Ion	28
LOM Ion T	32
MOL cap	15
POA lab E	28
THE aus	28
Shrubs + Screening	
BAN obl	2
BAN rob	2
COR alb	5
EPA Ion	3
GRE lin	2
HAR vio	5
RHA ind SM	12
TEL spe	7
WES fru GB	12
XAN aus	7
Trees:	
COR cit	2
EUC hae	1
GIN bil	2
TRI lau L	2

Planting Notes:

- + Planting design subject to detailed design and documentation. Not for pricing or construction.
- + Refer to drawing 2046-13 for the master plant schedule and plant images.
- + Planting to be designed in accordance with the NSW RFS Appendix 4 of 'Planning for Bush Fire Protection 2019'. Refer to requirements on drawing 2046-09.
- + All garden area subgrade to be cultivated prior to installation of new imported organic garden soil.
- + All garden areas to include 300mm depth of imported organic garden soil.

 All podium planters to be 1000mm minimum depth of imported organic garden soil.
- + All garden areas to be mulched with 75mm depth of imported organic garden mulch.
- + Species within mixed planting areas to be planted in groupings of 3-5.
- + Sub-surface drainage to all garden areas, connected to site stormwater.
- + All garden areas (excluding softscape works within the road verge) are to include a fully automated irrigation system connected to the sites rainwater harvesting system (subject to detailed design by a suitably qualified irrigation consultant).
- + The green roof to the communal facilities building will include 300mm depth of light-weight planting media. The green roof will be irrigated from stormwater harvested from site. The green roof will not be publicly accessible.

Area H

Garden area to the level 6 communal terrace, within podium planters. This includes a productive communal garden (productive species not listed).

Plant Code:	Quantity:
Groundcovers + Cl	imbers:
CAS gla CI	8
DIC arg SF	12
SEN man	15
VIO hed	15
ZEP can	12
Grasses, Ferns + Br	oad-leaved:
ALC imp SP	3
ART cir	7
CLI min	9
DIA cae LJ	12
HEL psi A	9
LIR mus EG	12
LOM Ion T	12
MOL cap	15
POA lab E	12
Shrubs + Screening	j:
RHA ind SM	7
SYZ aus R	8
WES fru GB	12
Trees:	*
TRI lau I	5

Area I

Green roof with a mixture of robust groundcovers and grasses to provide a green outlook from surrounding apartments. Green roof will not be publicly accessible.

,	
Plant Code:	Quantity:
Groundcovers + Climbe	ers:
ACT hel	80
CAS gla CI	120
CHR api	120
DIC arg SF	120
DIC rep	120
GRE lan MT	120
HIB sca	80
SEN man	80
VIO hed	120
ZEP can	120
Grasses, Ferns + Broad-	leaved:
ANI BG	80
DIA cae LJ	120
DOR exc	25
FIC nod	120
LIR mus EG	120
LOM Ion	60
LOM Ion T	120
POA lab E	120
THE aus	60
Shrubs + Screening:	
BAN rob	12
HAR vio	15
WES fru GB	18
XAN aus	12





Area J

Planted buffers along the western and southern boundary, utilising a mixture of 100% endemic species (species selection from Northern Beaches Council plant list for Frenchs Forest Ward).

	İ
	Quantity:
Groundcovers + Climbe	rs:
ACT hel	280
CIS ant	240
DIC rep	370
GLY cla	120
HIB sca	180
KEN rub	120
VIO hed	370
Grasses + Ferns:	
ADI aet	180
CYM ref	180
DIA cae	420
DOO asp	180
FIC nod	280
LOM Ion	420
THE aus	280
Shrubs + Screening:	
ACA lin	45
ACA Ion	58
BAN eri	55
BAN obl	85
BAN rob	85
BAN spi	60
DOD tri	45
EPA Ion	90
GOO ova	54
GRE lin	84
GRE spe	60
TEL spe	58
XAN aus	60
Trees:	
ANG cos	6
BAN ser	4
CAL ser	3
CER ape	3
EUC hae	4
TRI lau	15

Area K

Planted buffer along the eastern boundary, utilising a mixture of 100% endemic species (species selection from Northern Beaches Council plant list for Frenchs Forest Ward).

Plant Code:	Quantity:
Groundcovers + Cl	imbers:
ACT hel	45
CIS ant	50
DIC rep	180
HIB sca	80
VIO hed	180
Grasses + Ferns:	
ADI aet	54
CYM ref	85
DIA cae	120
DOO asp	65
FIC nod	65
LOM Ion	120
THE aus	80
Shrubs + Screening	9:
ACA lin	21
BAN eri	24
BAN obl	15
BAN rob	12
BAN spi	12
EPA Ion	15
GOO ova	15
GRE lin	27
GRE spe	18
TEL spe	24
XAN aus	24
Trees:	
ANG cos	2
BAN ser	1
CAL ser	1
EUC hae	1
TRI lau	2

Planting Notes:

- + Planting design subject to detailed design and documentation. Not for pricing or construction.
- + Refer to drawing 2046-14 for the master plant schedule and plant images.
- + Species selection from the Northern Beaches Council plant list for the Frenchs Forest Ward.
- + Planting to be designed in accordance with the NSW RFS Appendix 4 of 'Planning for Bush Fire Protection 2019'. Refer to requirements on drawing 2046-09.
- + All buffer planting garden areas are within deep soil areas.
- + All garden area subgrade to be cultivated prior to installation of new imported organic garden soil.
- + All garden areas to include 300mm depth of imported organic garden soil.
- + All garden areas to be mulched with 75mm depth of imported organic garden mulch.
- + Species within mixed planting areas to be planted in groupings of 3-5.
- + Sub-surface drainage to all garden areas, connected to site stormwater.
- + All garden areas (excluding softscape works within the road verge) are to include a fully automated irrigation system connected to the sites rainwater harvesting system (subject to detailed design by a suitably qualified irrigation consultant).







Plant Schedule - Groundfloor Building Surrounds, Green Roof & Roof Terrace: (to be read in conjunction with Planting Plan 2046-11)

Code	Scientific name:	Common name:	Pot size:	Mature height & spread*:	Planting density:	Quantity
	Groundcovers + Climbers:					
ACT hel	Actinotus helianthi	Flannel Flower	140mm Pot	0.5 x 0.5m	4 /m2	115
CAS gla CI	Casuarina glauca 'Cousin It'	Sheoak	140mm Pot	0.3 x 0.3m	4 /m2	210
CHR api	Chrysocephalum apiculatum	Yellow Buttons	140mm Pot	0.2 x 0.2m	8 /m2	195
DIC arg SF	Dichondra argentea 'Silver Falls'	Silver Falls	140mm Pot	0.1 x 0.3m	8 /m2	260
DIC rep	Dichondra repens	Kidney Groundcover	Tubestock	0.1 x 0.3m	8 /m2	295
GRE lan MT	Grevillea lanigera 'Mt Tamboritha'	Spider Flower	140mm Pot	0.1 x 0.3m	4 /m2	205
HIB sca	Hibbertia scandens	Guinea Flower	140mm Pot	0.4 x 1m	4 /m2	143
SEN man	Senecio mandraliscae	Blue Chalksticks	140mm Pot	0.3 x 0.6m	4 /m2	190
VIO hed	Viola hederacea	Native Violet	Tubestock	0.1 x 0.3m	8 /m2	300
ZEP can	Zephyranthes candida	White Wind Flower	140mm Pot	0.2 x 0.2m	8 /m2	291
	Grasses, Ferns + Broad-leaved:					
ALC imp SP	Alcantarea imperialis 'Silver Plum'	Bromeliad	300mm Pot	0.5 x 0.5m	1/m2	27
ALO mac	Alocasia macrorrhiza	Giant Taro	300mm Pot	1.5 x 1m	2 /m2	12
ANI BG	Anigozanthos 'Bush Gold'	Kangaroo Paw	140mm Pot	0.5 x 0.5m	4 /m2	137
ART cir	Arthropodium cirratum	New Zealand Rock Lilly	140mm Pot	0.6 x 0.6m	4 /m2	60
ASP aus	Asplenium australasicum	Birds Nest Fern	200mm Pot	1 x 1m	1/m2	29
	· ·			+		
SLE gib	Blechnum gibbum	Silver Lady Fern	140mm Pot	0.4 x 0.4m	4 /m2	77
TE set	Clivia miniata	Clivia	140mm Pot	0.4 x 0.4m	4 /m2	73
ITE set	Ctenanthe setosa 'Grey Star'	Dive Flev Like	140mm Pot	1 x 0.5m	3 /m2	40
DIA cae LJ	Dianella caerulea 'Little Jess'	Blue Flax Lily	Tubestock	0.5 x 0.5m	6 /m2	315
000 asp	Doodia aspera	Prickly Rasp Fern	140mm Pot	0.4 x 0.4m	6 /m2	73
OOR exc	Doryanthes excelsa	Gymea Lilly	200mm Pot	1.5 x 1m	1/m2	53
IC nod	Ficinia nodosa	Knobby Clubrush	Tubestock	0.6 x 0.6m	4 /m2	221
HEL psi A	Heliconia psittacorum L.f cv. 'Andromeda'	Heliconia (Orange)	200mm Pot	1 x 0.5m	3 /m2	64
MP cyl	Imperata cylindrica	Blady Grass	Tubestock	0.6 x 0.6m	4 /m2	75
IR mus EG	Liriope muscari 'Evergreen Giant'	Giant Mondo	140mm Pot	0.6 x 0.6m	4 /m2	267
OM Ion	Lomandra longifolia	Mat-rush	Tubestock	0.9 x 0.9m	4 /m2	95
OM Ion T	Lomandra longifolia 'Tanika'	Lomandra Tanika	140mm Pot	0.6 x 0.6m	4 /m2	275
MOL cap	Molineria capitalata	Weevil Lilly	200mm Pot	1 x 0.5m	3/m2	113
OA lab E	Poa labillardieri 'Eskdale'	Common Tussock Grass	140mm Pot	0.5 x 0.5m	4 /m2	230
THE aus	Themeda australis	Kangaroo Grass	Tubestock	0.5 x 0.5m	4 /m2	136
	Shrubs + Screening:					
ALP zer	Alpinia zerumbet	Shell Ginger	200mm Pot	1.8 x 1m	2 /m2	37
BAN obl	Banksia oblongifolia	Fern-leaved Banksia	200mm Pot	1.5 x 1.5m	1/m2	10
BAN rob	Banksia robur	Swamp Banksia	200mm Pot	1.5 x 1.5m	1/m2	34
OR alb	Correa alba	White Correa	200mm Pot	1.5 x 1m	2 /m2	40
PA lon	Epacris longiflora	Native Fuschia	200mm Pot	1.5 x 1.5m	1/m2	8
GRE lin	Grevillea linearifolia	White Spider Flower	200mm Pot	1-2 x 2m	1/m2	5
AR vio	Hardenbergia violacea	Purple Coral Pea	200mm Pot	0.8 x 0.8m	3 /m2	55
		,				
RHA ind SM	Rhaphiolepis indica 'Snow Maiden'	Indian Hawthorn White	200mm Pot	0.8 x 0.8m	3 /m2	78
SYZ aus R	Syzygium australe 'Resilience'	Lilly Pilly	25L	2 x 1m	1/m2	24
EL spe	Telopea speciosissima	Waratah	200mm Pot	3 x 2m	1/m2	20
'HY max	Thysanolaena maxima	Tiger Grass	200mm Pot	2 x 1.5m	1/m2	15
/IB odo EL	Viburnum odoratissimum 'Emerald Lustre'	Viburnum	25L	2 x 1m	1/m2	24
NES fru GB	Westringia fruticosa 'Grey Box'	Compact Coastal Rosemary	140mm Pot	0.5 x 0.5m	4 /m2	117
XAN aus	Xanthorrhoea australis	Grass Tree	300mm Pot	2 x 1m	1/m2	41
	Trees + Palms:					
ANG cos	Angophora costata	Smooth- Barked Apple	75L	25 x 10m	-	5
RC cun	Archontophoenix cunninghamiana	Bangalow Palm	Mix of 2-4m height	8 x 3m	-	10
OR cit	Corymbia citriodora	Lemon-scented Gum	75L	20 x 8m	-	5
LA eum	Elaeocarpus eumundii	Quandong	75L	9 x 3m	-	7
UC hae	Eucalyptus haemastoma	Scribbly Gum	75L	15 x 8m	-	3
ilN bil	Gingko biloba	Maidenhair tree	75L	12 x 8m	-	2
HOW for	Howea forsterana	Lord Howe Island Palm	Mix of 2-4m height	8 x 3m	-	11
.AG ind T	Lagerstroemia indica x fauriei 'Tuscarora (Hot Pink)'	Crepe Myrtle	75L	5 x 3m	-	21
_IV aus	Livistona australis	Cabbage Palm	Mix of 2-6m height	20 x 3m	-	20
TRI lau L	Tristaniopsis laurina 'Luscious'	Water Gum	75L	8 x 4m	_	14
i Ki iau L	matamopaia iaufiffa Eustious	Trater Guill	/ JL	0 X 4[1]		14
	Turf:					



ACT hel: Actinotus helianthi

CLI min: Clivia miniata

LIR mus EG: Liriope muscari



candida | White Wind Flower

CTE set: Ctenanthe setosa

LOM lon: Lomandra longifolia

COR alb: Correa alba

'Grey Star'

CAS gla Cl: Casuarina glauca
'Cousin It' | Sheoak

CHR api: Chrysocephalum
apiculatum | Yellow Buttons



ALC imp SP: Alcantarea

DIA cae LJ: Dianella caerulea

LOM Ion T: Lomandra

EPA lon: Epacris longiflora

DIC arg SF: Dichondra



DIC rep: Dichondra repens



HIB sca: Hibbertia scandens SEN man: Senecio





ALO mac: Alocasia

macrorrhiza | Giant Taro

DOO asp: Doodia aspera

MOL cap: Molineria capitalata

GRE lin: Grevillea linearifolia

White Spider Flower



ANI BG: Anigozanthos 'Bush Gold' | Kangaroo Paw



ART cir: Arthropodium cirratum | NZ Rock Lilly



ASP aus: Asplenium australasicum | Birds Nest Fern





DOR exc: Doryanthes excelsa



HEL psi A: Heliconia



IMP cyl: Imperata cylindrica







BAN obl: Banksia oblongifolia Fern-leaved Banksia



ALP zer: Alpinia zerumbet





SYZ aus R: Syzygium australe





HAR vio: Hardenbergia

violacea | Purple Coral Pea

ANG cos: Angophora costata

ARC cun: A. cunninghamiana Bangalow Palm

indica 'Snow Maiden'



Lemon-scented Gum

ELA eum: Elaeocarpus eumundii | Quandong



BAN rob: Banksia robur

odoratissimum 'EmeraldLustre'

GIN bil: Gingko biloba

VIB odo EL: Viburnum



Lord Howe Island Palm

WES fru GB: Westringia

HOW for: Howea forsterana LAG ind T: L.indica x fauriei

'Tuscarora' | Crepe Myrtle

XAN aus: Xanthorrhoea

australis | Grass Tree

LIV aus: Livistona australis



- + * Nominal height / spread at maturity will vary based on maintenance regimes and site growing conditions.
- Planting design subject to detailed design and documentation.
 Species selection subject to availability at time of tendering and construction.

haemastoma | Scribbly Gum Maidenhair tree

Plant Schedule - Buffer Zones:

(to be read in conjunction with Planting Plan 2046-12)

Code	Scientific name:	Common name:	Pot size:	Mature height & spread*:	Planting density:	Quantity
	Groundcovers + Climbers:					
ACT hel	Actinotus helianthi	Flannel Flower	140mm Pot	0.5 x 0.5m	4 /m2	325
CIS ant	Cissus antarctica	Kangaroo Vine	Tubestock	0.3 x 0.6m	4 /m2	290
DIC rep	Dichondra repens	Kidney Groundcover	Tubestock	0.1 x 0.3m	8/m2	550
GLY cla	Glycine clandestina	Love Creeper	140mm Pot	0.3 x 2m	4 /m2	120
HIB sca	Hibbertia scandens	Guinea Flower	140mm Pot	0.4 x 1m	4 /m2	260
KEN rub	Kennedia rubicundra	Dusky Coral Pea	140mm Pot	5 x 3m	4 /m2	120
VIO hed	Viola hederacea	Native Violet	Tubestock	0.1 x 0.3m	8 /m2	550
	Grasses + Ferns:					
ADI aet	Adiantum aethiopicum	Common Maidenhair	140mm Pot	0.4 x 0.4m	6 /m2	234
CYM ref	Cymbopogon refractus	Barbed Wire Grass	Tubestock	1 x 1m	4 /m2	265
DIA cae	Dianella caerulea	Blue Flax Lily	Tubestock	0.5 x 0.5m	4 /m2	540
DOO asp	Doodia aspera	Prickly Rasp Fern	140mm Pot	0.4 x 0.4m	6 /m2	245
FIC nod	Ficinia nodosa	Knobby Clubrush	Tubestock	0.6 x 0.6m	4 /m2	345
LOM lon	Lomandra longifolia	Mat-rush	Tubestock	0.9 x 0.9m	4 /m2	540
THE aus	Themeda australis	Kangaroo Grass	Tubestock	0.5 x 0.5m	4 /m2	360
	Shrubs + Small Trees:					
ACA lin	Acacia linifolia	Flax-leaved Wattle	140mm Pot	2-5 x 2-4m	1/m2	66
ACA Ion	Acacia longifolia	Sydney Golden Wattle	140mm Pot	4-6 x 2-4m	1/m2	58
BAN eri	Banksia ericifolia	Heath-leaved Banksia	140mm Pot	2 x 2m	1/m2	79
BAN obl	Banksia oblongifolia	Fern-leaved Banksia	140mm Pot	1.5 x 1.5m	1/m2	100
BAN rob	Banksia robur	Swamp Banksia	140mm Pot	1.5 x 1.5m	1/m2	97
BAN spi	Banksia spinulosa	Hairpin Banksia	140mm Pot	2 x 2m	1/m2	72
DOD tri	Dodonaea triquetra	Common Hop-Bush	140mm Pot	3 x 2m	1/m2	45
EPA lon	Epacris longiflora	Native Fuschia	140mm Pot	1.5 x 1.5m	1/m2	105
GOO ova	Goodenia ovata	Hop Goodenia	140mm Pot	1 x 1-3m	1/m2	69
GRE lin	Grevillea linearifolia	White Spider Flower	140mm Pot	1-2 x 2m	1/m2	111
GRE spe	Grevillea speciosa	Red Spider Flower	140mm Pot	3 x 2m	1/m2	78
TEL spe	Telopea speciosissima	Waratah	140mm Pot	3 x 2m	1/m2	82
XAN aus	Xanthorrhoea australis	Grass Tree	140mm Pot	2 x 1m	1/m2	84
	Trees:					
ANG cos	Angophora costata	Smooth- Barked Apple	75L	25 x 10m	-	8
BAN ser	Banksia serrata	Old Man Banksia	75L	5-10 x 5m	-	5
CAL ser	Callicoma serratifolia	Black Wattle	75L	15 x 6m	-	4
CER ape	Ceratopetalum apetalum	Coachwood	75L	25 x 10m	-	3
EUC hae	Eucalyptus haemastoma	Scribbly Gum	75L	15 x 8m	-	5
TRI lau	Tristaniopsis laurina	Water Gum	75L	15 x 6m	-	17

Notes:

- + * Nominal height / spread at maturity will vary based on maintenance regimes and site growing conditions.
- + Planting design subject to detailed design and documentation.
 + Species selection subject to availability at time of tendering and construction.



refractus | Barbed Wire Grass

BAN eri: Banksia ericifolia



ACT hel: Actinotus helianthi CIS ant: Cissus antarctica Kangaroo Vine

BAN obl: Banksia oblongifolia

TEL spe: Telopea speciosissima



DOO asp: Doodia aspera

BAN rob: Banksia robur

XAN aus: Xanthorrhoea

australis | Grass Tree

Prickly Rasp Fern



FIC nod: Ficinia nodosa

BAN spi: Banksia spinulosa

ANG cos: Angophora costata

Smooth- Barked Apple

Knobby Clubrush

GLY cla: Glycine clandestina

LOM lon: Lomandra longifolia

DOD tri: Dodonaea triquetra

Common Hop-Bush

BAN ser: Banksia serrata Old Man Banksia

Mat-rush



HIB sca: Hibbertia scandens KEN rub: Kennedia rubicundra VIO hed: Viola hederacea

THE aus: Themeda australis





ADI aet: Adiantum





Sydney Golden Wattle



Flax-leaved Wattle

GOO ova: Goodenia ovata GRE lin: Grevillea linearifolia



CAL ser: Callicoma serratifolia
Black Wattle

CER ape: Ceratopetalum
apetalum | Coachwood



EUC hae: Eucalyptus haemastoma | Scribbly Gum



GRE spe: Grevillea speciosa

TRI lau: Tristaniopsis laurina





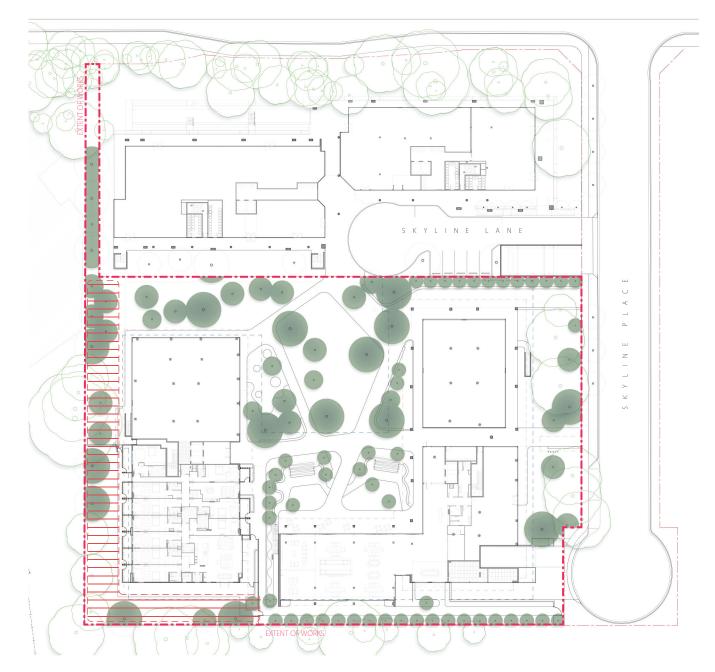
Existing Tree Canopy Cover Diagram



Approximate existing tree canopy cover over the site pre-development = 1,618 m² (20.7%)

Comments on existing canopy cover diagram

- + Tree canopy cover based on received site survey prepared by 'Chadwick Cheng Consulting Surveyors', dated 11.12.17.
- + Tree canopy sizes based on received arborist report prepared by 'Naturally Trees', dated 21.01.21.
- + Tree canopies are illustrative only based on the information received from the arborist and surveyor.
- + Diagram includes all existing trees on site and includes trees recommended for removal by the arborist.



Proposed Tree Canopy Cover Diagram



Approximate proposed tree canopy cover over the site post-development = 2,342 m² (30.0%)

Comments on proposed canopy cover diagram

- + Tree canopy cover based on proposed tree species mature height and mature canopy size. Tree canopy extent may vary and will be based on site growing conditions and maintenance regimes.
- + Concept design only subject to detailed design and documentation.
- + Hatched area subject to review by Bush Fire consultant and RFS as part of detailed design, particularly once inner protection area (IPA) and outer protection area (OPA) are clearly defined and the RFS requirements can be applied in detail to the site. Refer to the NSW Rural Fire Service Integrated Development Application (DA2021-0212 (CNR-19692)) Referral Response, dated 17.05.2021, and the Bushfire Assessment Report, prepared by Building Code & Bushfire Hazard Solutions,







