St Columba's Catholic College

August 2022



LOCATION MAP

Drawing Schedule

Drawing Number	Revision		
DA-L000	А		
DA-L001	А		
DA-L101	А		
DA-L102	А		
DA-L103	А		
DA-L201	А		
DA-L301	А		
	Drawing Number DA-L000 DA-L001 DA-L101 DA-L102 DA-L103 DA-L201 DA-L301		

Statutory & Regulatory Guidelines

The City of Blue Mountains

• Blue Mountains Local Environmental Plan (LEP) 2015

• Blue Mountains Development Control Plan (DCP) 2015

• SEPP (Educational Establishments & Child Care Facilities) 2017

• RFS Planning for Bush Fire Protection (2006); Appendix 5: Landscaping & Property Maintenance



PROJECT

ST COLUMBA'S CATHOLIC COLLEGE 168 HAWKESBURY ROAD, SPRINGWOOD

1/28 Adelaide Street East Gosford NSW 2250 Level 3, 23 Watt Street Newcastle NSW 2300 P: 02 4302 0477 • ABN 12 129 231 269

DRAWING NAME COVER SHEET





CLIENT CEDP **PROJECT NO** 21086 DRAWING NO DA-L000 SCALE NA

Landscape Report

August 2022

1.1 Site Description

The subject site is located within the school grounds of the St Columbas College, Hawkesbury Road Springwood NSW.

The existing topography of the school site is relative flat. The development site is situated within the northern part of the school grounds is located between the existing heritage stone (administration) building & stone (drama) building and a number of metal clad demountable classrooms. These demountable classrooms, existing bitumen paving, turf areas and existing trees will be all removed as part of this development.

The subject site is a rectangular site and has an existing cross fall of approximately 1:20 and a longitudinal fall of approximately 1:100. Some of the St Columbas College buildings and grounds are heritage-listed under the Local Government Act for historical and cultural significance. There is a significant amount of native woodland vegetation to the north of the school grounds and the development site has been identified as having a BAL-29 Bush fire rating.

1.2 Proposed Development Design:

A new two storey classroom block with under-croft and basement level areas; designed by Alleanza Architecture, and provides the opportunity to link the older heritage buildings to the new architecture by providing a connection open space area between the old and new. The landscape design intent is providing a connection space between the new classroom block and the existing buildings as well as providing a series of break-out spaces for students for passive recreation, study groups and congregation.

A selection of materials, finishes & fixtures have been considered, in response to the contemporary new architecture and the heritage significance of the existing buildings. This selection of materials and fixtures have also been considered in terms of DDA and Bush Fire rating compliance. Replace tree planting has been selected in regard to shade & amenity, solar access and bush fire as well as positioning the trees away from entry doorways and in respect to the existing planting palette and the existing heritage buildings.

The proposed landscape design is in response to the SEPP (Educational Establishments & Childcare Facilities) 2007, and in particular addresses some of the following principles identified in this SEPP.

2.0 SEPP (Educational Establishments & Child Care Facilities) 2017

2.1 Principle 1 – Context, Built Form & Landscape

Schools should be designed to respond to and enhance the positive qualities of their setting, landscape and heritage, including Aboriginal cultural heritage. The design and spatial organisation of buildings and the spaces between them should be informed by site conditions such as topography, orientation and climate.

Landscape should be integrated into the design of school developments to enhance on-site amenity, contribute to the streetscape and mitigate negative impacts on neighbouring sites. School buildings and their grounds on land that is identified in or under a local environmental plan as a scenic protection area should be designed to recognise and protect the special visual qualities and natural environment of the area, and located and designed to minimise the development's visual impact on those gualities and that natural environment.

As mentioned, the proposed landscape design intent for this development is to provide a suitable space between the proposed classroom block and existing heritage buildings to provide a connection and interaction series of spaces for the students and staff. Seating nodes, outdoor study areas, congregation spaces and passive recreation areas have all been included in the landscape design and solar access and heritage, cultural factors have been considered. Predominantly low water use groundcover species have been selected as a suitable understorey under the trees with respect to clear surveillance, sight lines, bush fire hazard reduction and shadowing.



Good design combines positive environmental, social and economic outcomes. Schools and school buildings should be designed to minimise the consumption of energy, water and natural resources and reduce waste and encourage recycling. Schools should be designed to be durable, resilient and adaptable, enabling them to evolve over time to meet future requirements. All proposed plant species selection has been considered in terms of soil types, species hardiness and on-going watering maintenance requirements using on-site stored rainwater for irrigation purposes. An automatic drip line irrigation system will be implemented in accordance with minimum Australian standards. Species selection will be a mixture of exotic and native hardy species that are suited to the local climatic and geological conditions and will be quick to establish, and to reduce ongoing landscape maintenance requirements such as pruning.

School buildings and their grounds should provide good wayfinding and be welcoming, accessible and inclusive to people with differing needs and capabilities. Note. Wayfinding refers to information systems that guide people through a physical environment and enhance their understanding and experience of the space. Schools should actively seek opportunities for their facilities to be shared with the community and cater for activities outside of school hours.

Circulation, connectivity and accessibility have been considered with this landscape design and will include some of the following;

Connectivity

 No 'dead—end' spots • Implementation of intersection nodes where paths intersect, and which may include way-finding signage, congregation nodes and seating.

2.4 Principle 4 – Health and Safety

Good school development optimises health, safety and security within its boundaries and the surrounding public domain, and balances this with the need to create a welcoming and accessible environment.

• Avoid planting new tree & shrub species close to paths and hard paved areas that are known for excessive flower and foliage drop that may cause slip hazards

• Avoid planting new tree and shrub species that are known to be toxic or may cause respiratory, allergy and/ or skin irritations.

Shrub species, sizing & locations are to ensure that passive surveillance is maintained at building entries and all plantings are to be layered to with smaller groundcovers. Shrubs have been excluded from door and window openings in compliance with RFS bush fire hazard reduction initiatives.

2.5 Principle 5 – Amenity Schools should provide pleasant and engaging spaces that are accessible for a wide range of educational, informal and community activities, while also considering the amenity of adjacent development and the local neighbourhood. Schools located near busy roads or near rail corridors should incorporate appropriate noise mitigation measures to ensure a high level of amenity for occupants. Schools should include appropriate, efficient, stage and age appropriate indoor and outdoor learning and play spaces, access to sunlight, natural ventilation, outlook, visual and acoustic privacy, storage and service areas.



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2.2 Principle 2 – Sustainable, Efficient and Durable

2.3 Principle 3 - Accessible and Inclusive

• Established a path hierarchy for main connecting paths, covered walkway links, egress and maintenance

Segregation of pedestrian paths from vehicular roads and driveways.

With the proposed landscape design for this school development, we would implement the following safety planting initiatives:

• Avoid planting new tree species that are prone to potential limb drop

• Avoid planting new tree species that are known for invasive root structure that may damage paths and hard paved areas, which may cause trip hazards

The planting design strategy for the proposed landscape are to enhance the amenity of the new classroom block development and are to include the following:

- the development

2.6 Principle 6 – Whole of Life, Flexible and Adaptive

School design should consider future needs and take a whole-of-life-cycle approach underpinned by site wide strategic and spatial planning. Good design for schools should deliver high environmental performance, ease of adaptation and maximise multi-use facilities.

• Refer 2.5 - Principle 5: Amenity

2.7 **Principle 7 – Aesthetics**

School buildings and their landscape setting should be aesthetically pleasing by achieving a built form that has good proportions and a balanced composition of elements. Schools should respond to positive elements from the site and surrounding neighbourhood and have a positive impact on the quality and character of a neighbourhood.

The built form should respond to the existing or desired future context, particularly, positive elements from the site and surrounding neighbourhood and have a positive impact on the quality and sense of identity of the neighbourhood. The landscape aesthetics for planting (soft-works) have already been referred in Section 2.5 - Principle 5: Amenity. The following materials and finishes of the hard-works have been considered in the landscape design for this school development:

Materials & Finishes

- activation of spaces
- concrete glare
- and the heritage buildings.

Bush Fire Hazard Reduction Initiatives:

As the subject site is identified as 'bushfire prone land' and has a Bal-29 Bush Fire rating and there are a number of bush fire hazard reduction initiatives have been considered in regard to the landscape design and ongoing landscape maintenance. Some of these bush fire hazard reduction initiatives are as follows:

reduce potential fuel load canopy.

5. Limited use of combustible landscape materials particularly in high flammable risk areas 6. No shrubs to be planted in close proximity to window and door openings, and trees to be planted minimum distances from proposed buildings so mature canopies are clear of roof overhangs or eaves.

Proposed tree species within appropriate deep soil zones to assist in reducing bulk & scale of

Proposed evergreen trees to provide shade & amenity

Proposed deciduous trees for solar access & seasonal change

• Provide a broad sensory planting palette to include a variety of colour, texture, aroma & form • Respectful in regard to the heritage significance of existing buildings

• Appropriate species in regard to Appendix 5; Planning for Bush Fire Protection (2006).

Implementation of sculptural forms (seating) with in the landscape to interest and encourage

• Appropriate selection of furniture, fixtures, materials & finishes for robustness and durability • Range of paving material surfaces & finishes to define spaces

• Use of exposed aggregate concrete or colour oxide concrete paving to assist in reducing

• Ensuring some of the furniture selected is DDA compliant to cater for people with disabilities • Materials, fixtures & finishes are appropriate within the context of the existing school surrounds

1. The identified Asset Protection Zone (APZ) to the north of the subject site is to be well maintained in regard to ongoing landscape maintenance. Turf or unirrigated grassed areas to be mowed on a regular basis. Leaf litter, twigs and branches to be removed on a regular basis to

2. Selection of suitable 'fire -retardant' tree & plant species to be implemented. Low grasses and groundcovers (not tall shrubs) are to be located directly under the canopies of proposed trees. 3. Irrigated well maintained garden beds and provision of an ongoing landscape maintenance schedule will be implemented as part of the construction documentation for the project. 4. Proposed trees are to be located singularly or in groups to achieve a discontinuous



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DRAWING NAME OVERALL LANDSCAPE PLAN

CLIENT	CEDP				REVISION	А
PROJECT NO	21086				DATE	30.08.2022
DRAWING NO	DA-L101					
SCALE	1:200 @ A1	0 1 2	4	6	10m	

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168 HAWKESBURY ROAD, SPRINGWOOD

LANDSCAPE PLAN (1 of 2)

DRAWING NO DA-L102 SCALE 1:100 @ A1 0 1 2 3 4 5m

168 HAWKESBURY ROAD, SPRINGWOOD

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LANDSCAPE PLAN (2 of 2)

DRAWING NO DA-L102 SCALE 1:100 @ A1 0 1 2 3 4 5m

PROJECT ST COLUMBA'S CATHOLIC COLLEGE 168 HAWKESBURY ROAD, SPRINGWOOD

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DRAWING NAME PRECEDENT IMAGES

CLIENT CEDP **PROJECT NO** 21086 DRAWING NO DA-L201 SCALE NA

REVISION A **DATE** 30.08.2022

Image	Botanical Name	Common Name	Mature Height (m.)	Mature Spread (m.)	Pot Size	Com
Shade A	menity Trees	Dworf Apple Cum	6	6	751	
01	Angophora hispida Corventia exima	Dwarf Vellow Blackwood	8	0 7	75L 45I	
01	Brachychiton acerifolius	Illawarra Flame Tree	15	5	43L 75l	Stake
02	Elaeocarpus reticulatus	Blueberry Ash	10	5	45L	Stake
-	Tristaniopsis 'Luscious'	Luscious Water Gum	8	5	75L	Stake
03	Waterhousia floribunda 'Sweeper'	Weeping Lilly Pilly	10	7	75L	Stake
	_					
Feature	Irees Backhousia citriodora	Lemon Myrtle	5-10	2-5	751	Stake
	Banksia serrata	Old Man Banksia	10	5	451	Stake
	Betula pendula	Moss White Silver Birch	8	3	75L	Stake
	Cornus florida cultivar	Flowering Dogwood	8	5	45L	Stake
	Cornus kousa 'Satomi'	Satomi Kousa Dogwood	6	4	75L	Stake
04	Corymbia ficifolia 'Orange Splendour'	Dwarf Flowering Gum	6	4-6	45L	Stake
	Banksia integrifolia	Coast Banksia	6	3	75L	
Deciduo	us Trees	Dener berk Menle	0	0	751	Chalva
05	Acer griseum	Paper-bark Maple	0	9	75L 451	Stake
05	Eravinus angustifolia 'Baywood'	Claret Ash	2.4	2.4	49L 75I	Stake
06	Lagerstroemia indica y Lagerstroemia	Crene Murtle	5	о З-4	75L 75l	Stake
00	Lagersi denna indica X E. Tauner	Narrow Tulin Tree	20	2- 4	751	Olake
	Malus joensis 'plena'	Iowa Crab Apple	6	4	45L	
07	Pvrus callervana 'Capital'	Capital Pear	10	3	75L	Stake
	Ulmus glabra 'Lutescens	Golden Elm	10	12	75L	
Tall Shru	ıbs > 1.5m					
	Banksia robur	Swamp Banksia	2	2	300mm	
	Breynia cernua 'Ironstone Range'	Coffee Bush	2	1.5	300mm	
	Grevillea banksii 'Alba'	White Banks Grevillea	2.5	2	500mm	Squir
	Hakea bakeriana	Hakea	2	1.5	300mm	Squir
	Leptospermum polygalifolium	Tantoon	2	1.5	300mm	Squir
	Syzigium australe 'Pinnacle'	Pinnacle Narrow Lilly Pilly	7.5	1.5	300mm	
08	Viburnum plicatum f. tomentosum 'Mariseii'	Japanese Snowball	4	4	200mm	
Low Shr	ubs < 1.5m					
	Banksia oblongifolia	Fern-leaved Banksia	1	1	200mm	Squir
09	Callistemon 'Better John'	Better John Bottlebrush	1.2	0.9	200mm	
10	Grevillea lanigera	Soft Leaved Grevillea	1	1	200mm	
11	Scarlet Ribbon'	Scarlet Ribbon	2	1.5	300mm	
12	Rhaphiolepsis indica 'Cosmic White'	Indian Hawthorn	1.5	1.5	200mm	
13	Westringia 'Zena'	Sea Mist Coastal Rosemary	1	1	200mm	
Mass Pla	anted Groundcovers					
	Ajuga reptans	Purple Bugle	0.15	0.15	140mm	
	Convolvulus cneorum	Silver Bush	0.5	1	140mm	
14	Dichondra repens	Kidney Weed	0.1	1.5	100mm	
	Helichrysum petiolare	Licorice Plant	0.6	1	140mm	
15	Myoporum parvifolum Yareena'	Yareena Creeping Boobialla	0.1	1	140mm	
	Neomarica gracilis	Walking Iris	0.5	0.5	140mm	
	Poa labillardieri 'Kingsdale'	Blue Tussock Grass	0.45	0.45	140mm	
10	Santolina chamaecyparissus	Lavender Cotton	0.6	0.3	200mm	
16	westringia wundi	westringia mundi	0.6	1.5	140mm	
Low Bor	der Planting	New Zealand Hair Sedge	0.6	0.6	140mm	
17	Chrysocenhalum aniculatum 'Desert Flame'	Yellow Buttons	0.5	0.3	140mm	
.,	Dianella caerulea 'Little Jess'	Little Jess Flax Lilv	0.4	0.4	140mm	
18	l irione muscari 'Isabella'	Isabella Fine Leaf Lirione	0.4	0.5	140mm	
19	Lomandra confertifolia 'Wingarra'	Lomandra Wingarra	0.4	0.6	140mm	
Cascadiı	ng Planting					
	Casuarina glauca 'Cousin It'	Cousin It	0.3	1	140mm	
20	Hardenbergia violacea 'Meema'	Meema Snake Vine	0.5	2	140mm	
	Rosmarinus officinalis 'Blue Lagoon'	Blue Lagoon Rosemary	0.3	1	140mm	
Shade To	olerant Planting		4	4	140	
20	Asplenium australasicum	Birds Nest Fern	1	1	140mm	
01	ASPIAISTA EIATION	Cast Iron Plant	U./ 1	U.5 1	140mm	
∠ I	Blechnum pudum	Silver Lady Fern		1 0.5	140mm	
00		FISHDONE WATER FERN	U.7 15	0.0 5	140mm 300mm	
22	Doodia aspera	Prickly Reen Forn	13 0 <i>A</i>	0.4	140mm	
23	Macrozamia communis	Burrawang	1	1.5	140mm	
24	Philodendron 'Xanadu'	Xanadu Dwarf Philodendron	0.8	0.8	140mm	
- ·	Pteris tremula	Tender Brake	1	0.8	140mm	
25	Viola hederacea	Native Violet	0.1	0.3	140mm	

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DRAWING NAME INDICATIVE PLANT SCHEDULE

CLIENT CEDP **PROJECT NO** 21086 DRAWING NO DA-L301 SCALE

REVISION A **DATE** 30.08.2022