



MACKILLOP COLLEGE
WYNDHAM VALE CAMPUS

*"Find Happiness in making others happy."
(Mary MacKillop)*

*"The flowers will unveil the hidden secrets of
their beauty; the stones reveal their crystalline
structure, and the tiniest insect display
wonders..." (Julian Tenison Woods)*

MASTER PLAN



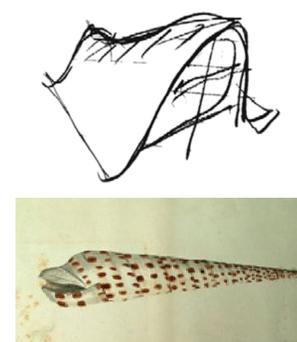


1 Response to Catholic Identity & Vision and Value of Mackillop College

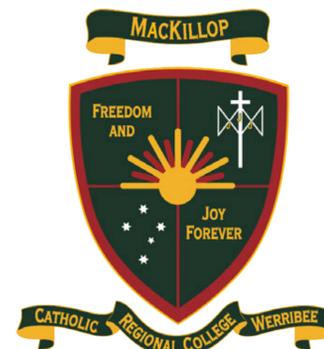
2 Public and Cultural Benefits



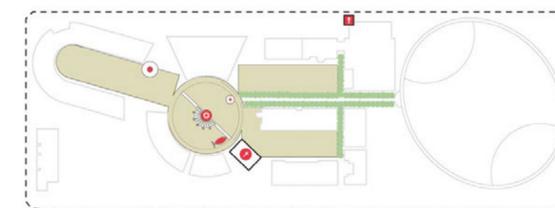
Main Entry



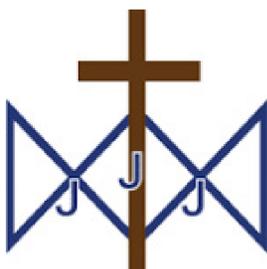
The naturalist drawings of Tenison Woods as inspiration



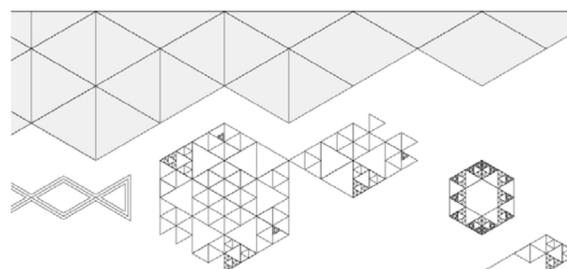
The endangered golden sun moth symbol of renewal, rebirth and resurrection



After Hours Entry & "Hole in the wall"



The Josephite Emblem (left) and Mary's beautiful cross hatch writing (right)



The Josephite Emblem + Sierpinski Triangle Diagram



Central Green Heart of the School



Remnant of school Portland (left) and St Joseph hole in the wall Grattan Street, Carlton (right)



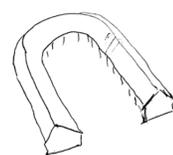
The Avenue



Primary School

Mary MacKillop and Julian Tenison-Woods formed a unique formidable partnership. Mary, born into pre-boom Melbourne, suffered many hardships, none of which deterred her from her belief and her mission to make children's lives better.

Julian, the polymath, designed the Josephite Ave-Maria emblem. This insignia, overlaid with the cross and the initials of Joseph, Jesus & John encapsulated Mary's spiritual world view: synonymous with her story, movement and legacy. It has been used as inspiration for the main school entry. Elements that convey Catholic Identity, and the Vision & Values of Mackillop College are infused throughout the Master Plan.



The modest Penola school house & art centre from the heart of the school



The Chapel

Wyndham Vale offers a slice of the Australian suburban dream. An environment both better and worse than the suburban environments of the past.

This new campus presents the opportunity to enrich the suburb, to offer an educational experience not yet available that integrates faith and learning, offers community facilities that do not exist and offers a focal point for community life.

This task is about designing a pathway to a legacy, a place that will be a new and enriching experience, a Catholic design that exudes confidence and reaches out to the community and fulfills the mission described by his Holiness:

"Christians have the duty to announce it without excluding anyone (the gospel), not as one who imposes a new obligation, but as one who shares a joy, signals a beautiful horizon, offers a desirable banquet".



3 Relationship to Built Form and Context

The site is open, gently sloped, with a modest clump of eucalyptus, grassland to the west, a mound of spoil on the east and is dotted with basalt boulders. Surrounded on three sides by roads with new houses, on the south it joins an open field, a future council recreational reserve. The site's low surrounding-built form will result in both hot and cold northerlies as well as southerlies, at times outdoor conditions will be challenging.

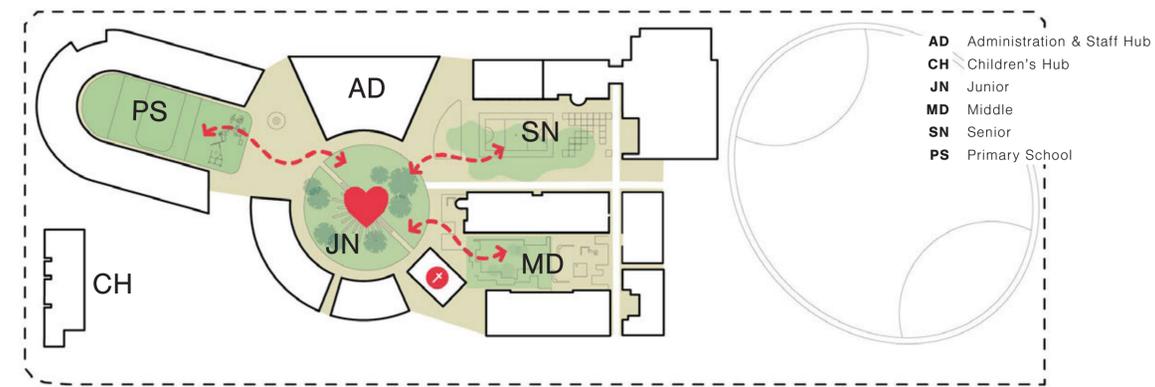
MCR proposes an urban form to mitigate negative environmental conditions. We imagined a handsome variety of meaningful buildings, set in a regenerated natural setting, which embrace and surround an inner world of generous green courtyards, each associated with a distinct cohort of students.

The Administration and main school address is on the north boundary (Stanmore Crescent.). This will allow the Administration to be central in the campus. In the absence of consultation with the school, the proximity gazumped the attraction of a Welcome Parade frontage, allowing for more on street parking and is close to the bus stop.



Street Interface, Admin Building

4 Program Resolution



Radiating from the school's heart, the Master Plan strategy delineates a family of distinct interconnected courtyards.

We like the concept of 'schools within a school'. The whole school is like a complex mini city with connected precincts each with their own character, but each contributing to the richness of the whole. The centre of the school is a place shared by all, a gathering space. It is also a civic space where 'the city institutions' (the chapel, the gallery, the town hall, etc) encircle it, giving the symbolic space form and meaning.

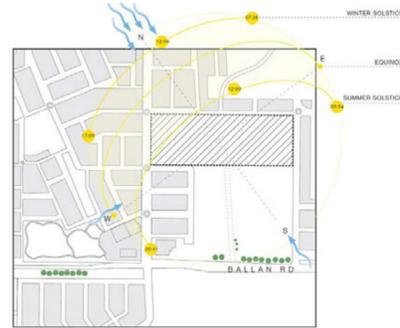
These Master Plan impressions are to illustrate an idea about the campus, where the architecture changes and responds to the life of the student's, their development, their memory. The Primary School is a smaller scale, and domestic, reminiscent of the Penola schoolhouse. The Junior years are civic but playful. The Middle years take on the metaphor of an evolving puzzle, whilst the Senior years adopts a university feel – a precursor to independence and future academic life.



Existing Site Conditions



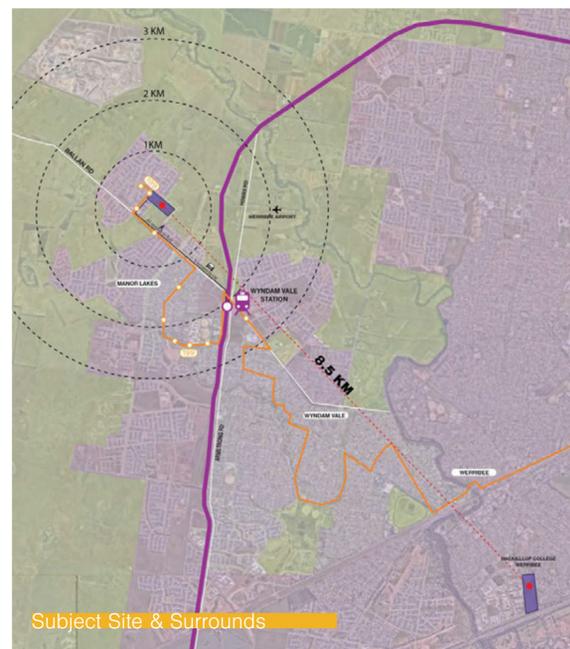
Land Use



Environment



Movement



Subject Site & Surrounds



The Horseshoe Courtyard



Interconnected Courtyards

Table A - MacKillop Proposed Learning Spaces									
Primary	Master Plan	Stage 1	Stage 2	Stage 3	Secondary	Master Plan	Stage 1	Stage 2	Stage 3
General Learning Area (GLA)	21	9	15	21	General Learning Area (GLA)	45	-	-	-
Specialist Learning Spaces					Specialist Learning Spaces				
STEAM	3	1	2	3	Science	8	-	-	-
Food Tech	1	-	-	1	Visual Art	6	2	6	6
Performing Arts / Music	1	-	1	1	Digital Tech	6	2	4	4
Physical Education	1	-	1	1	Design Tech	6	2	2	2
Wellbeing	1	1	1	1	Food Tech	2	-	-	-
					Music / Drama / Dance	5	2	5	5
					VCE Vocational Major	1	-	-	-
					Physical Education	2	-	-	-
Total Permanent Learning Spaces	25	11	20	28	Total Permanent Learning Spaces	82	24	43	53
Relocatable GLA	-	-	-	4	Relocatable GLA	-	4	6	6
Relocatable Specialist	-	-	-	4	Relocatable Specialist	-	-	2	6
Total Learning Spaces	25	11	20	36	Total Learning Spaces	82	28	51	65
Maximum Number of Students (25 students/space)	700	275	500	900	Maximum Number of Students (25 students/space)	2050	700	1275	1625
Maximum Number of Students (20 students/space)	560	220	400	720	Maximum Number of Students (20 students/space)	1640	560	1020	1300
Relocatables					Relocatables				
Stage 1 - 1 x Food Tech, 2 x Design Tech, 1 VA/Design Tech					Stage 1 - 1 x Food Tech, 2 x Design Tech, 1 VA/Design Tech				
Stage 2 - 1 x Food Tech, 2 x Design Tech, 2 x Science + 2 x GLAs					Stage 2 - 1 x Food Tech, 2 x Design Tech, 2 x Science + 2 x GLAs				
Stage 3 - 1 x Food Tech, 1 x Music, 2 x STEAM, 4 x GLA					Stage 3 - 1 x Food Tech, 1 x Music, 2 x STEAM, 4 x GLAs				



5 Cost and Value



Primary School Colonnade

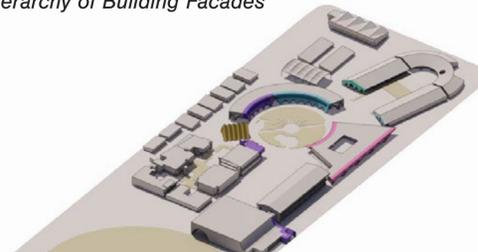
Specialists in this project typology, we understand the parameters and constraints that bound them. Our expertise is to maximize the opportunity within tight budgets. This skill comes from having successfully undertaken these projects at this scale.

There are general approaches in our work that contribute to this balancing act:

- Work until it's right.
- Understand our building and construction systems.
- Hierarchy, expressive complexity at key points, elegant simplicity at the others
- Understand staging, to increase ease of construction, minimize aborted work and utility costs.
- Effective communication with QS and consultant team
- High quality documentation

Tables A & B outline a proposal for accommodation across the various stages of the masterplan development. They are based on the principle of maximizing the use and flexibility of space (particularly at the initial stages) thus maximizing the school's curriculum offer. This will be outlined in detail at the presentation.

Hierarchy of Building Facades



The Chapel Place, Stage 1-4

Table B - MacKillop Proposed Schedule of Accomodation												
Primary	Master Plan (m2)	Stage 1	Stage 2	Stage 3	Secondary	Master Plan (m2)	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
Library / Resource Centre	210	-	-	-	Library / Resource Centre	780	-	-	-	780	-	-
Physical Education / Hall	370	-	-	-	Physical Education / Hall	1820	-	-	-	1820	-	-
General Learning Area (GLA)	1680	1280	800	800	General Learning Area (GLA)	4,090	1280	800	800	-	-	800
Administration / Staff	360	345	115	445	Administration / Staff	1,640	345	115	445	40	50	45
Pupil Amenities	210	230	85	60	Pupil Amenities	558	230	85	60	155	90	60
Travel / Engineering	610	730	560	505	Travel / Engineering	3,997	730	560	505	400	410	190
STEAM	315	-	-	-	Science	1,101	-	-	-	-	960	-
Wellbeing	80	240	480	-	Visual Art	504	240	480	-	-	-	-
Food Technology	80	250	720	-	Digital Technology	755	250	720	-	-	-	-
Performing Art / Music	80	-	-	-	Design Technology	182	-	-	-	-	780	-
					Food Technology	360	-	-	-	360	-	-
					Music / Drama / Dance	669	240	450	-	-	-	-
Area of New Construction	3995	1580	1315	1100	Area of New Construction	14,785	3315	3210	1810	3555	2290	1095
Total Area	3995	1580	2895	1100	Total Area	14,785	3315	6525	5020	5365	5845	3385
Percentage of Guidelines	100%	40%	73%	28%	Percentage of Guidelines	101%	23%	45%	34%	37%	40%	23%
LTE 525 Guideline Area per Student (m2) Guideline Area (m2)	525 7.6 3990				LTE 525 Guideline Area per Student (m2) Guideline Area (m2)	1500 9.75 14625	Maintenance +200m2		Maintenance +200m2		Chapel +400m2	

6 Sustainability

Building clever by using structural systems such as Cross-Laminated Timber (CLT) and concrete composites, as well as intelligent design i.e. reducing column grids, footing design, use of cellular beams, and hollow core concrete, allow for carbon savings. The structure of a building contains 40% of its embodied carbon, representing the greatest opportunity to reduce carbon.

In material selection, we favour bio-based material. Mandating efficient building practices in the Tender Documentation can also minimize emissions.

Mechanical and electrical efficiencies through improved insulation, airtightness, on-site solar and green energy, providing mixed-mode and non-air-conditioned spaces where appropriate.

The volcanic plains were once home to sprawling native grasslands filled with insects, reptiles, bird and marsupials. In this project, and in accordance with Laudato Si's call to respond to the cry of the earth, we can play our role in native regeneration.

Our design team are looking to re-use rocks on site for nature play, integrate and retain good trees, provide rain gardens and lush planting of trees, shrubs and grasses throughout with Indigenous and native species to promote biodiversity and connection to nature, whilst reducing heat sink.



Central Green Heart Courtyard

7 Response to Client and User Needs

The distinct heart of the Master Plan is the centre of the school and a focal point for the faith-based community. Strategically located facilities can be used by the school community (PE, food tech, kitchen, library) on the site's perimeter. Facilitating future opportunities for revenue raising and other community programs as the school sees appropriate. It is our proposition that a deeply considered, meaningful, playful architecture can ground our memories, provoke our thinking, and enhance our well-being.

In testing the Master Plan footprints and staging, we have used our extensive knowledge of education space typologies. We have co-located programmes that have synergies and can create new and exciting opportunities. We relish the opportunity to work with the school's educators and students to explore the various learning space models and develop one that is flexible, robust and optimises the Mackillop Educators style and teaching philosophy.

By listening to the various points of view in the design process, we fulfil the church's call for Synodality, joining together in this common mission, and in the spirit of Mary MacKillop to provide the best possible educational environment for the people of Wyndham Vale.



Academic Lane



Junior School Colonnade

Master Plan Staging Diagram

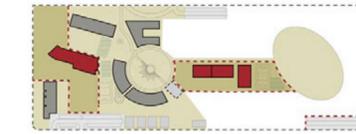
- Stage 0**
- Children's Hub
 - Playground, Landscaping, Carparking



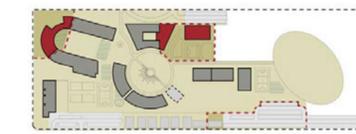
- Stage 1**
- AD-1: Reception, Staff, Student Services
 - PS-1: 9 x GLA, STEAM(VA), Wellbeing
 - LNJ: 16 x GLA
 - SP-J: 6 x Makers (2 x VA, 2 x PA, 2 x DgT)**
 - Reloc: 1 x Food Tech, 2 x DsT, 1 x VA/DsT
 - Covered Hardcourt, Sports Field, Playground 1, Landscaping, Carparking, Maintenance



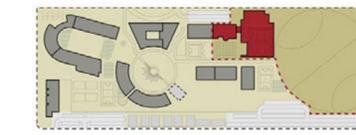
- Stage 2**
- PS-2: 6 x GLA, STEAM(Tech), PE, PA
 - LNM: 10 x GLA
 - VA: 4 x VA, 2 x DgT
 - PA: 5 x PA
 - Reloc: 2 x Science, 2 x GLA
 - Playground 2, Hardcourt, Landscaping, Carparking



- Stage 3**
- AD-2: Staff, Staff Services
 - PS-3: 6 x GLA, STEAM(Science), LRC, Food Tech
 - LNS: 10 x GLA
 - Reloc: 4 x GLA
 - Playground 3, Kitchen Garden, Half-Court, Landscaping, Carparking, Maintenance



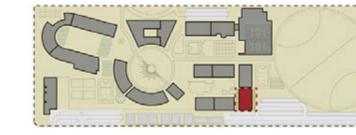
- Stage 4**
- LRC: Library & Resources
 - PE: 2 x Indoor Multi-courts, Canteen
 - FT: Food Tech, VM-Kitchen
 - Full Sports Oval, Landscaping



- Stage 5**
- ST: 8 x Science, 6 x DsT x GLA
 - CH: Chapel**
 - Landscaping



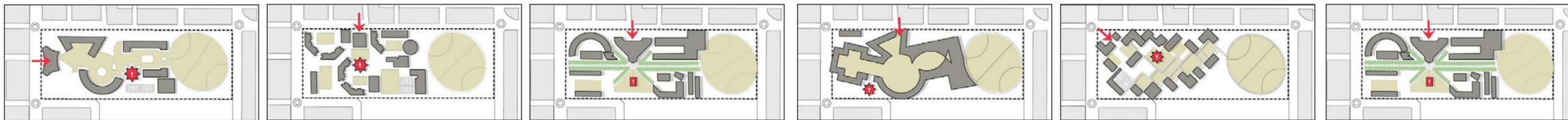
- Stage 6**
- LNM: 10 x GLA
 - Landscaping



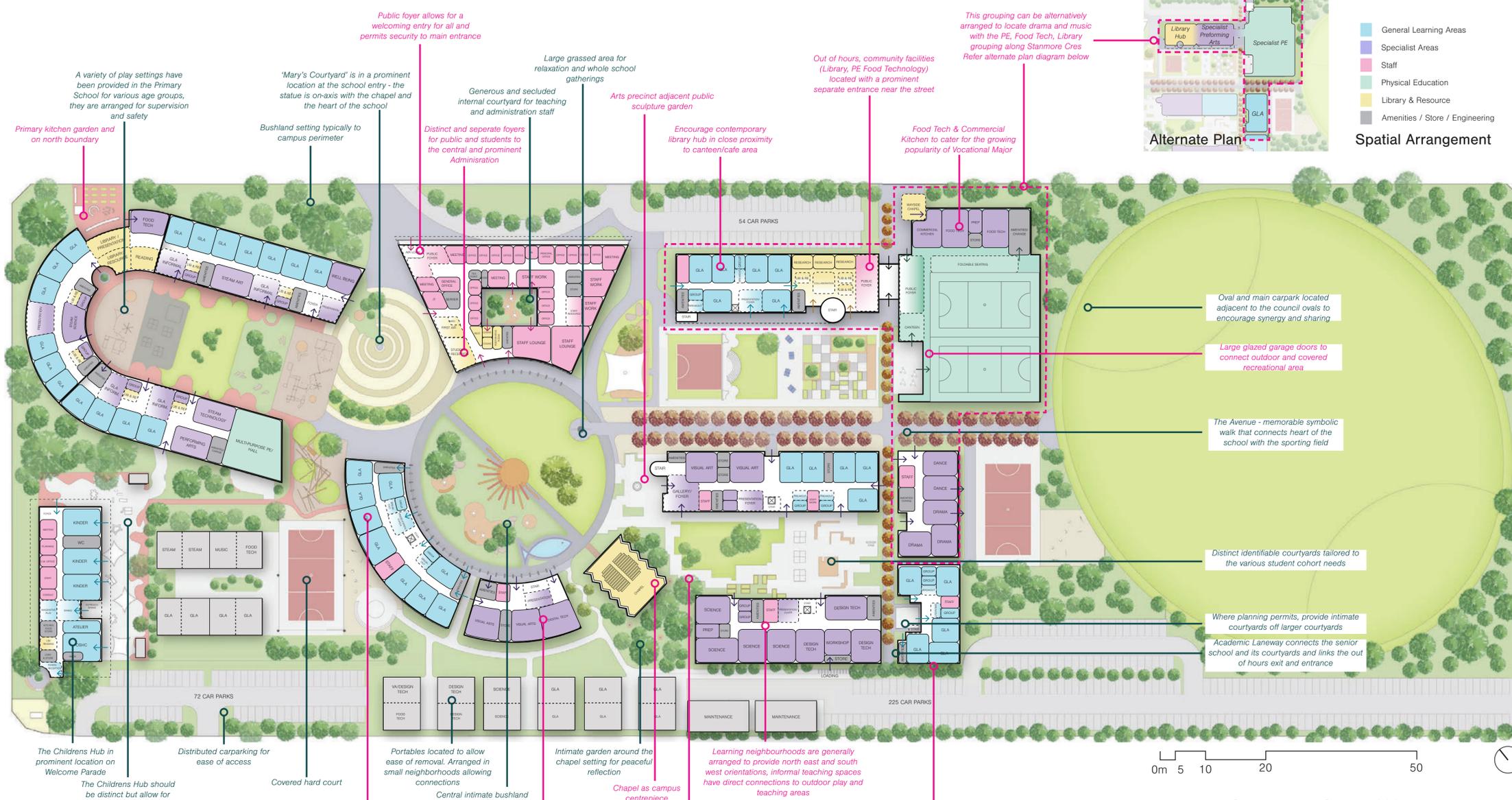
*SP-J Makers spaces revert to VA & DgT on completion of Stage 2.
**Chapel indicatively staged for Construction ease. Funding will dictate if separate stage or contract



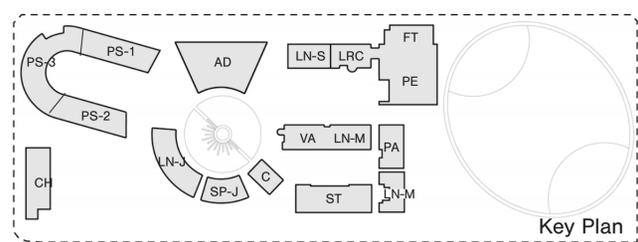
Master Plan and Landscape Concept Design



Design Options



Master Plan Ground Floor, Scale 1:800 @ A1



- AD Administration & Staff Hub
- C Chapel
- CH Children's Hub
- FT Food Technology Centre
- LRC Learning & Resource Centre
- LN-J Learning Neighbourhood - Junior
- LN-M Learning Neighbourhood - Middle
- LN-S Learning Neighbourhood - Senior
- PA Performing Arts Centre
- PE Physical Education Centre
- PS Primary School (Stages 1-3)
- SP-J Specialist Areas - Junior
- ST Science & Technology
- VA Visual Arts



Alternative Neighbourhood Typologies

Children's Hub
Junior
Middle
Senior



Celebrating all LIFE



DREAMING the new day



Challenging ALL people

Landscape Precedents



Children's Hub



Primary School



Junior School



Primary School Courtyard



Central Green Heart and Admin



Middle School Sculpture Garden



Middle School Courtyard



Intersection of The Avenue and Academic Lane



Senior School Courtyard



Middle School Sculpture Garden



Senior School and PE Hall



Senior School Courtyard