



Sophia Waldorf School Association

Master Plan

June 2021

DESIGN STATEMENT

Sophia Waldorf School aims to develop the whole child, their head, heart and hands, by providing meaningful and creative learning experiences.

... "To do this is to ennoble the mind, to fire the imagination, fortify the will and quicken initiatives for positive action in life"...

R. Steiner

This is the proposed masterplan with building locations in accordance with a sketch endorsed by Sophia Waldorf Association Comity and provided to BM_

- Demolition work to remove existing old cottage dwelling and axillary buildings indicated on the site and allow space for the future buildings development.
- Primary school to be allocated to the Western boundary of the site, in conjunction with the elevation contours.
- Junior areas prep through to Y2 are given own exterior breakout spaces from the GLA location.
- Y3 to Y6 are presented to the north west part of the site enclosed by the buffer zone around the Bunya trees.
- Senior school is proposed at the south east.
- The hall building should bring the community together under one roof and is located central to the site.

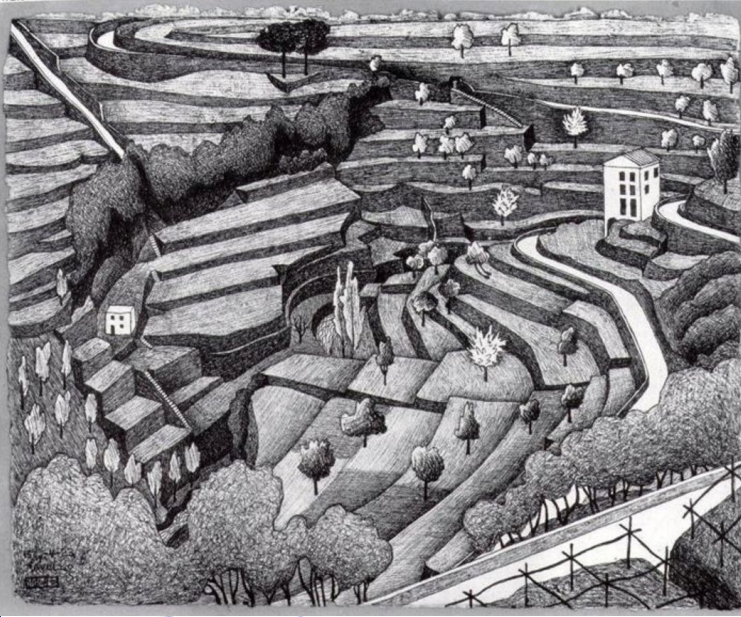




Beautiful sweeping site elevation promotes the use of leveling across the site.



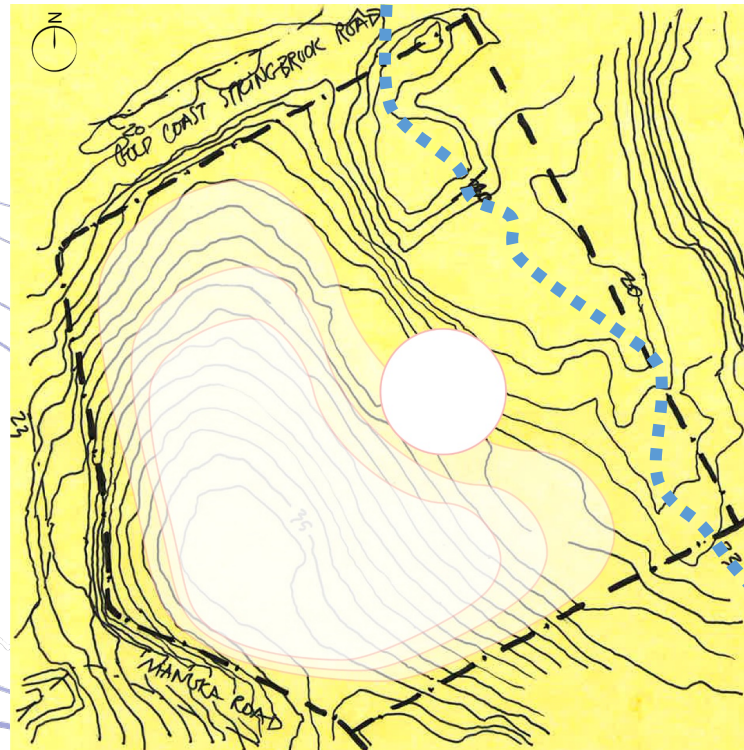
Examples of different levels of existing vegetation sizes and types.



Ravello II, M.C. Escher, 1923



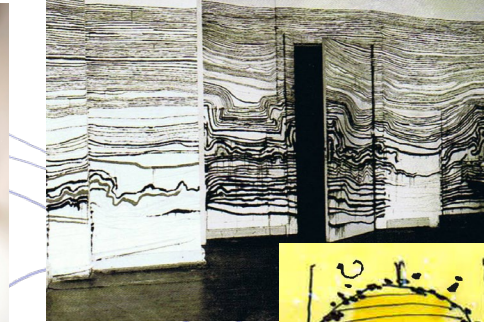
Machu Picchu Residential Quarter



- The consideration of accessibility and compliant traversal will be included in design.
- Levels can be curved to the contours of the site for the creation of outdoor recreational and educational spaces.
- Retaining levels further allows for the re-integration/maintenance of natural elements between buildings.
- Micro-leveling (step settings within the 1000mm elevations) can further reduce large areas into smaller more intimate space. These space will aid in smaller scale teaching as well as placemaking for the students
- Retaining and leveling can be achieved through multiple construction systems which may be considered to further differentiate space
- Given the elevation change and waterways onsite the retaining walls will need to factor drainage into the design



Rudolf Steiner School of Geneva, in Switzerland



- THE BUILDING SHOULD AND WILL BE:
- Receiving natural light
- Is designed with a quiet visual environment
- Uses warm colors on the walls and floor
- Has a large area of free space for building and diverse learning/play
- Has high-quality and purpose-designed furniture, fixtures and equipment
- Allows ease of movement
- Allows flexibility in learning varied activities
- Contains ergonomic furniture
- Is modular, meaning the teacher can easily change the space configuration



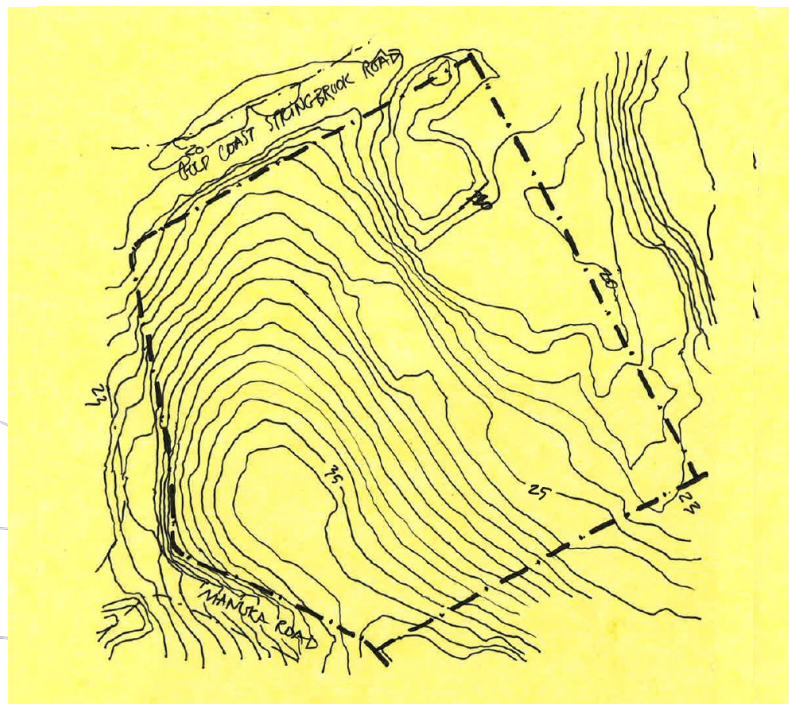
Gaudi Casa Balto Interior

Hundertwasser - The Hamburg Line (1959)

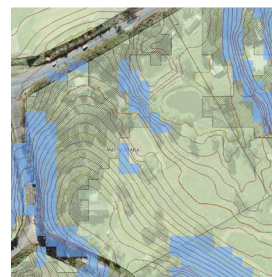
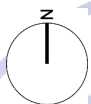


Yellow Train Steiner School in India

Topography



- Site elevation falls toward Eastern boundary of the site, where dam's currently aid with neighbouring water catchment.
- The buffer zone from the dams causes the building space to be limited on the eastern boundary. This area is proposed to be used for horticulture, practical biology, sport and recreation
- Erosion warnings are identified for areas of site with steep elevation.
- Potential platforms are indicated through areas of less elevation change, these are identified as potential building platforms.



Location in blue indicating a moderate threat of erosion or land slides

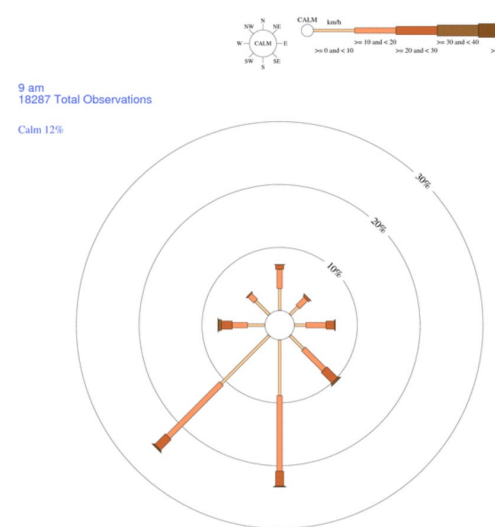


Location in blue indicating waterways with green the extended buffer zones

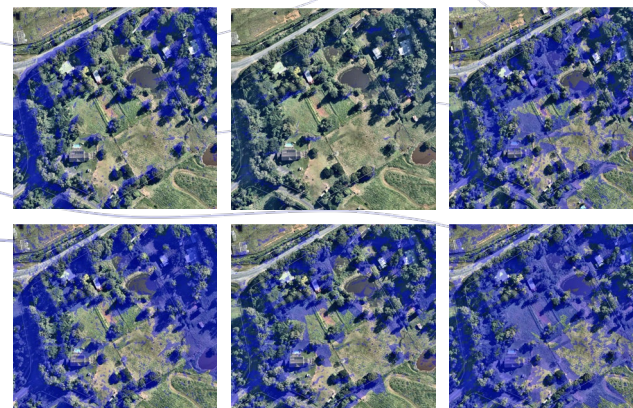
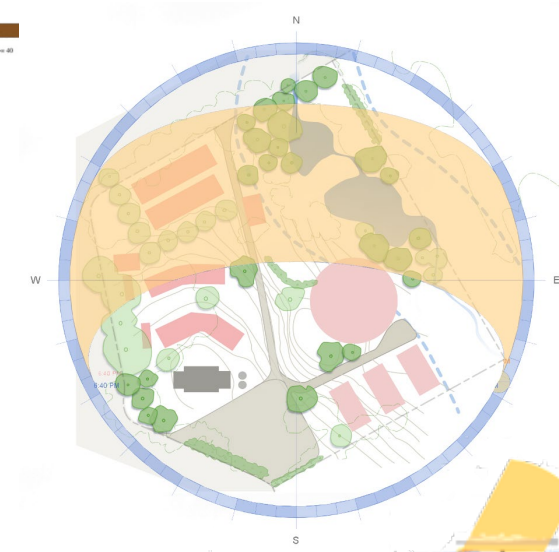


Some indication of bushfire concern, however location falls into the buffer zone.

Weather



- Majority of wind bias comes from south/South-western direction, therefore requiring investigation into adequate ventilation. Some northerly's appear in around late spring and will be considered in the building design.
- Sun path and trajectory indicates a critical need to address all north to east locations.
- Some existing shading through nature is present, and new planting will be proposed.
- Western sun is limited to some areas due to elevation fall as well as trees lining.



01/01/2021 – 8:30/12:30/4:30

- Summer shading at minimum
- High solar exposure
- Will have an impact on building response
- Western sun blocked

01/06/2021 – 8:30/12:30/4:30

- High focus on capturing the morning sun
- Limited afternoon exposure

Ecology



Reconfiguration of the of existing dams for regulation and filtration of rain water will be considered.

- Filling in dam to western side and keep the west natural line of waterway.
- This area is advantageous to natural environmental education



- Area guide of trees will be considered of significant native importance, as per the ecological analysis. Trees that are not of significant native importance may still hold value in the education principles of Steiner. The maturity of these trees is also a quality that cannot be easily re-obtained.
- In some areas current vegetation aids in the suppression of noise pollution from the main road, as well as western sun exposure and landslide hazards.
- Dams have been constructed as a man-made solution to rainfall, while their use is not needed for the proposed development.

Access



Manuka Rd from southern-most corner. Proposed location of main school entry, which will ultimately serve both junior and secondary



Secondary site access from Springbrook Gold Coast Rd . This will serve as secondary access for service road through site. Further investigation into the practical application will be required.



Some locations on site have easier natural "buildability" as opposed to others, these areas are primarily looking for cohesion and elevation of buildings. Although, some locations require further civil investigation these are locations to be built on and are identified by the association.





Proposed Critical Pathways

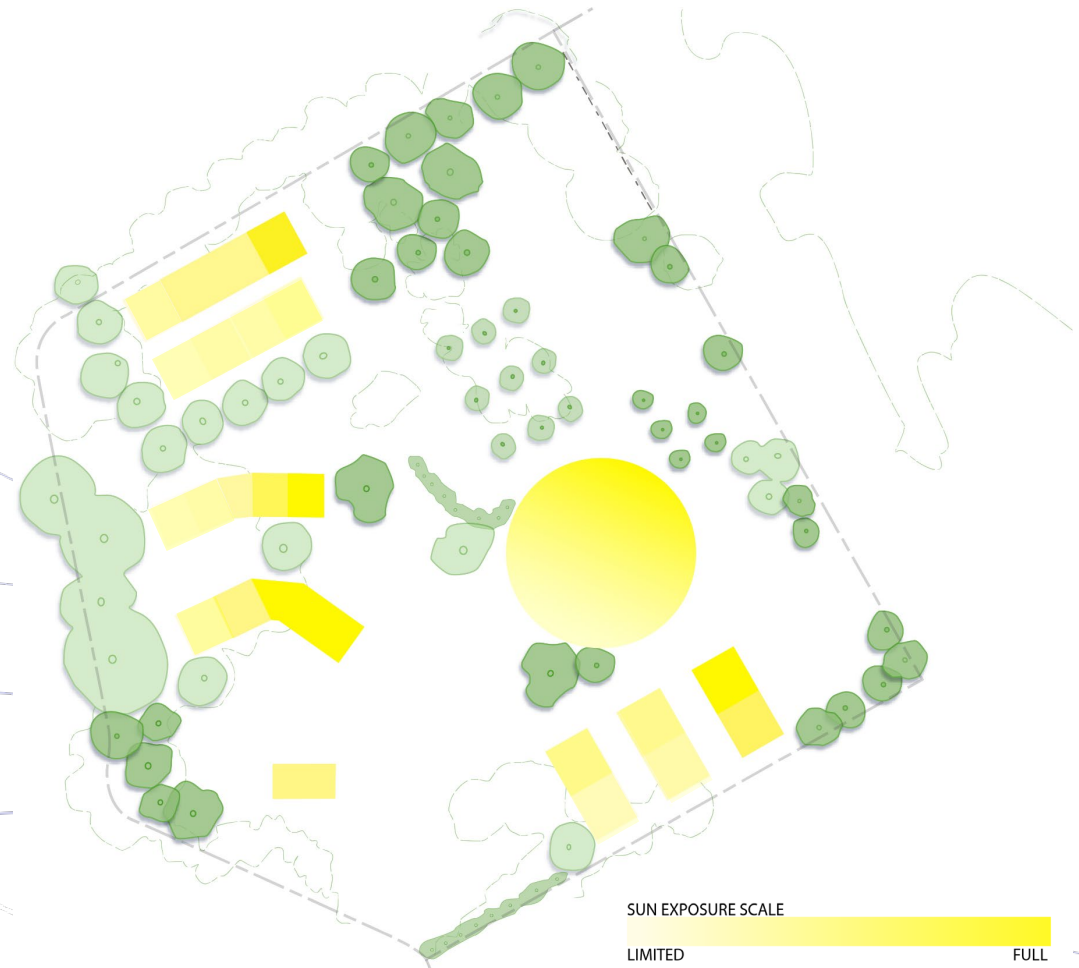
- A strong and fundamental spine acts as the connecting pathways throughout both the primary and senior school.
- Singular spine works in conjunction with connecting service road (secondary GCSB rd access).
- Sequence through site acts as gradual continuation of built form environments, starting at the landscaping level and moving into the enclosed spaces.
- Further investigation into the handling of accessibility will be required in order to meet code and not cause discrimination



Proposed Layout Views

Site visit indicates favourable views to the East and South of the site. More intimate views of surrounding vegetation available to West and North-East.

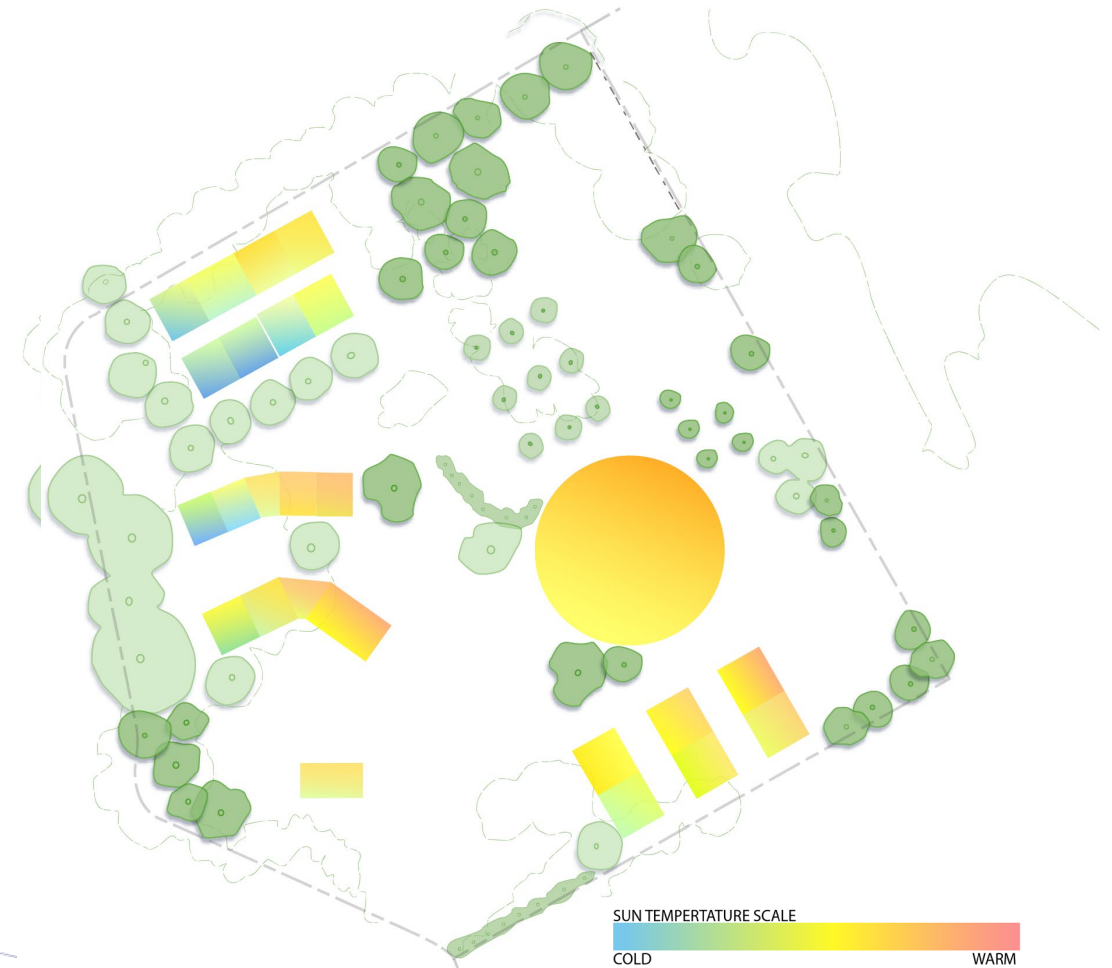
- Some building complexes are presented with less advantageous views when compare to other buildings. That should be mitigated during the building designs.
- Other areas of school have potential views available from at least one angle if not more.
- Views shown from previous site visit would be advantageous to capture as the connections to the environment aligns with the Steiner principles of education.



Proposed Sun intensity

Due to previously mentioned circumstances the site will naturally have areas of higher sun exposure and shading.

- Buildings that lack a North-Eastern orientation are less likely to receive natural lighting.
- Some buildings are further shadowed due to close tree/building proximity.
- Further rotation to promote North-Eastern orientation will likely increase overall sun exposure.
- Consideration of cluster layout (explicitly the y3-y6 group) would likely improve exposure.



Proposed natural light temperature

Different orientations and lighting exposure will cause a variation in hue of natural lighting. Therefore the building design and window orientation will be tailored to achieve wanted effects.

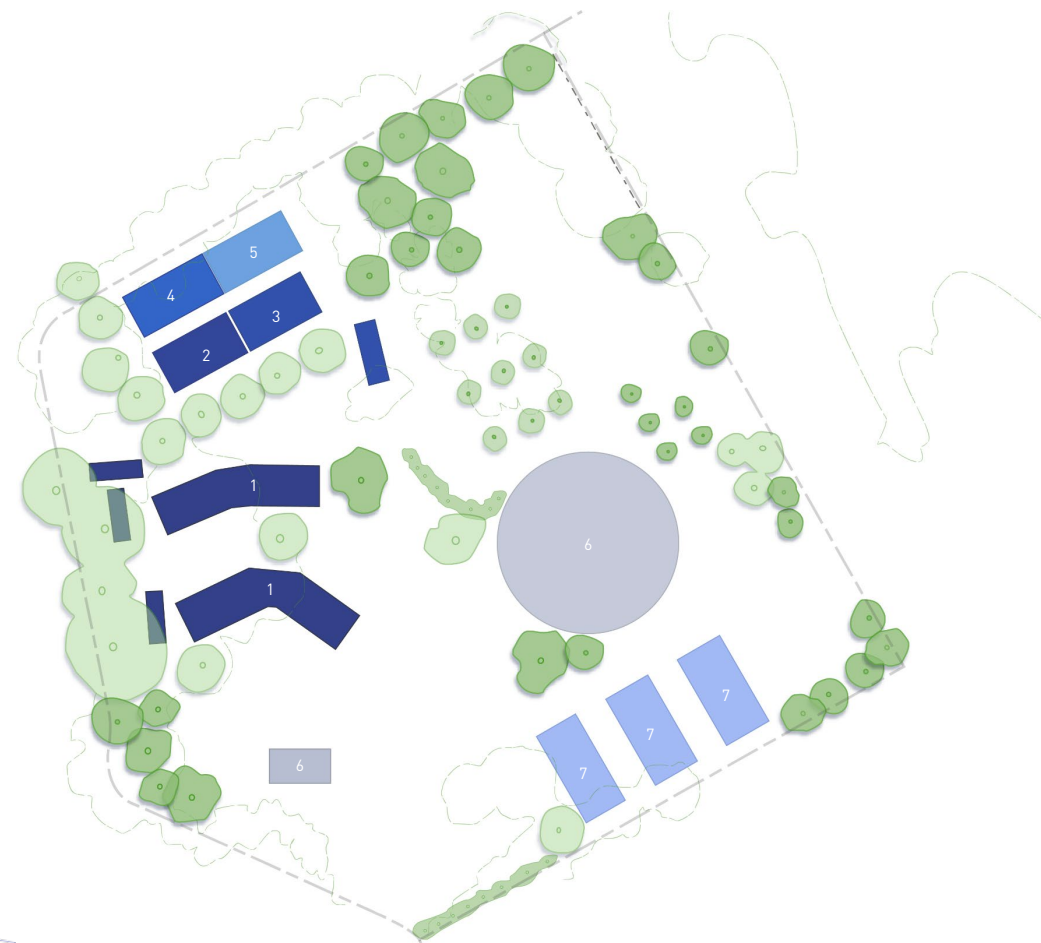


- EXISTING BUILDING
- PROPOSED SINGLE STOREY
- PROPOSED DOUBLE STOREY
- OUTDOOR PLAY AREA
- GREEN SPACE
- LANDSCAPE INFRASTRUCTURE
- SERVICE ROAD AND PARKING
- WATERWAY

Civic space allocation

This diagram demonstrate the overall investigation into the final built locations.

Landscaped infrastructure is the allocation of space that may share the properties of built form and nature, in similarity to the shown inspiration images



| Stage | Building(s) |
|-------|--|
| 1 | PREP – Y2, USE OF EXISTING DWELLING AS “ADMIN AND RESOURCES” |
| 2 | Y3 – AS PART OF A PROCESS TO CONTINUALLY BUILD THOUGH THE GRADES |
| 3 | Y4 |
| 4 | Y5 |
| 5 | Y6 |
| 6 | HALL AND PRE-PREP |
| 7 | SENIOR |



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INDICATIVE SITE MASTER PLAN WITH BUILDING ROOF AREAS
THE MASTER PLAN IS SUBJECT TO FURTHER SITE INVESTIGATIONS AND TECHNICAL ASSESSMENTS

PRELIMINARY ISSUE
NOT FOR CONSTRUCTION



NOTES:
EXISTING WATER WAY BUFFER TO BE CONFIRMED BY CONSULTANT.
PARKING IS ALLOCATED WITH LINEWORK TO BE CONFIRMED BY CONSULTANT.
DROP OFF ZONE SEPARATE LANES FOR PRIVATE DROP-OFF AND BUS, SIZE AND SAFETY ASPECT TO BE CONFIRMED BY TRAFFIC ENGINEER.
BUILDING SPACE ALLOCATION DEMONSTRATES TOTAL ROOF AREA OF BUILDING (INCLUDING VERANDA).

LEGEND

| | |
|------------------------------------|--|
| EXISTING BUILDING | |
| GROUND LEVEL BUILDINGS | |
| GROUND + 1 BUILDINGS | |
| LUNCH SHELTER | |
| WATERWAY BUFFER | |
| EROSION WARNING | |
| GREEN AREAS | |
| OUTDOOR PLAY ALLOCATION | |
| LANDSCAPED INFRASTRUCTURE/ PATHWAY | |
| NATIVE VEGETATION | |
| EXISTING VEGETATION | |
| PROPOSED VEGETATION | |
| TOPOGRAPHY | |
| SERVICE ROAD | |
| SITE PEDESTRIAN NAVIGATION | |
| SPECIALTY LANDSCAPE | |
| BUNYA SAFETY PERIMETER | |
| EXISTING WATERWAY | |
| PROPOSED WATERWAY | |
| NEIGHBOURING BUILDINGS | |
| DEMOLITION | |
| POWER POLE (PWRP) | |
| PROPOSED WATER TANK (WT) | |
| PARKING ROW INDICATION | |
| REED BED INDICATIVE LOCATION | |
| ROOF DETAIL LINE | |

SCALE: 1:1000 0 10 20 40 60M

ESTIMATED STUDENT ENROLLMENT
PREP TO Y6: 350+STAFF
Y7-Y12: 300+STAFF

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4213

DRAWING TITLE:
Master Plan
DATE: 30/09/21 SCALE:
CHECKED: Checker DRAWING: DA403
DRAWN: Author REVISION:

