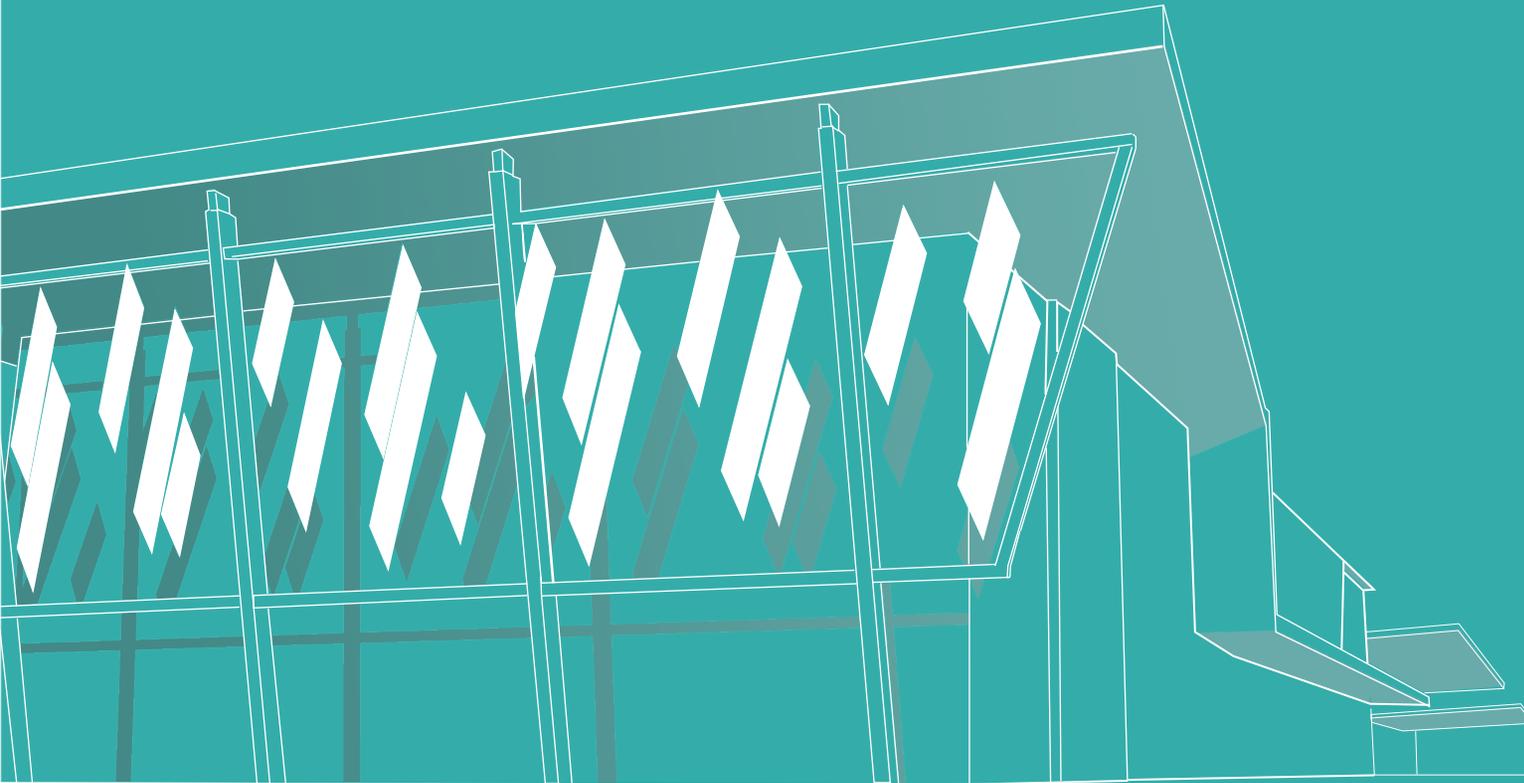


Design Statement - Yiribana Logistics Estate

Lot 59 & 60, DP 259135, 754-770 & 784-786 Mamre Road, Kemps Creek Estate



Disclaimer

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Note: All area calculations are advisory only and all figures should be checked and verified by a licensed surveyor.

Design Statement – Yiribana Logistics Estate

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PERSPECTIVE VIEW OF WAREHOUSE + OFFICE 1
Design Statement – Yiribana Logistics Estate

(Issue A)

INTRODUCTION



AERIAL PHOTOGRAPH



Introduction

This design statement report has been prepared by SBA Architects on behalf of GPT as part of the SSDA for 754-770 & 784-786 Mamre Road, Kemps Creek. It describes the design and planning considerations of Yiribana Logistics Estate comprising of warehouse facilities and ancillary offices.

The **vision of GPT** for Yiribana Logistics Estate is to create a cutting-edge industrial estate that celebrates meeting of people, movement of goods and natural environment through sustainable design.

Methodology

SBA Architects has undertaken the following during the preparation of this report;

- site analysis and identify opportunities and physical constraints
- setting out design principles based on research and analysis
- exploration of design concepts and testing of built forms
- review or make reference to the following documents;
 - Mamre Road Precinct Draft DCP
 - Western City District Plan
 - The Greater Sydney Region Plan, A Metropolis of Three Cities
 - Draft Aerotropolis Precinct Plan

Context + Site

754-770 & 784-786 Mamre Road is a large, 33.1 ha, site situated approximately 39km from the centre of Sydney CBD. It also sits in proximity to 3 major centres; 20km to Paramatta CBD, 14km to Penrith Town Centre and 18km to future Aerotropolis Core.

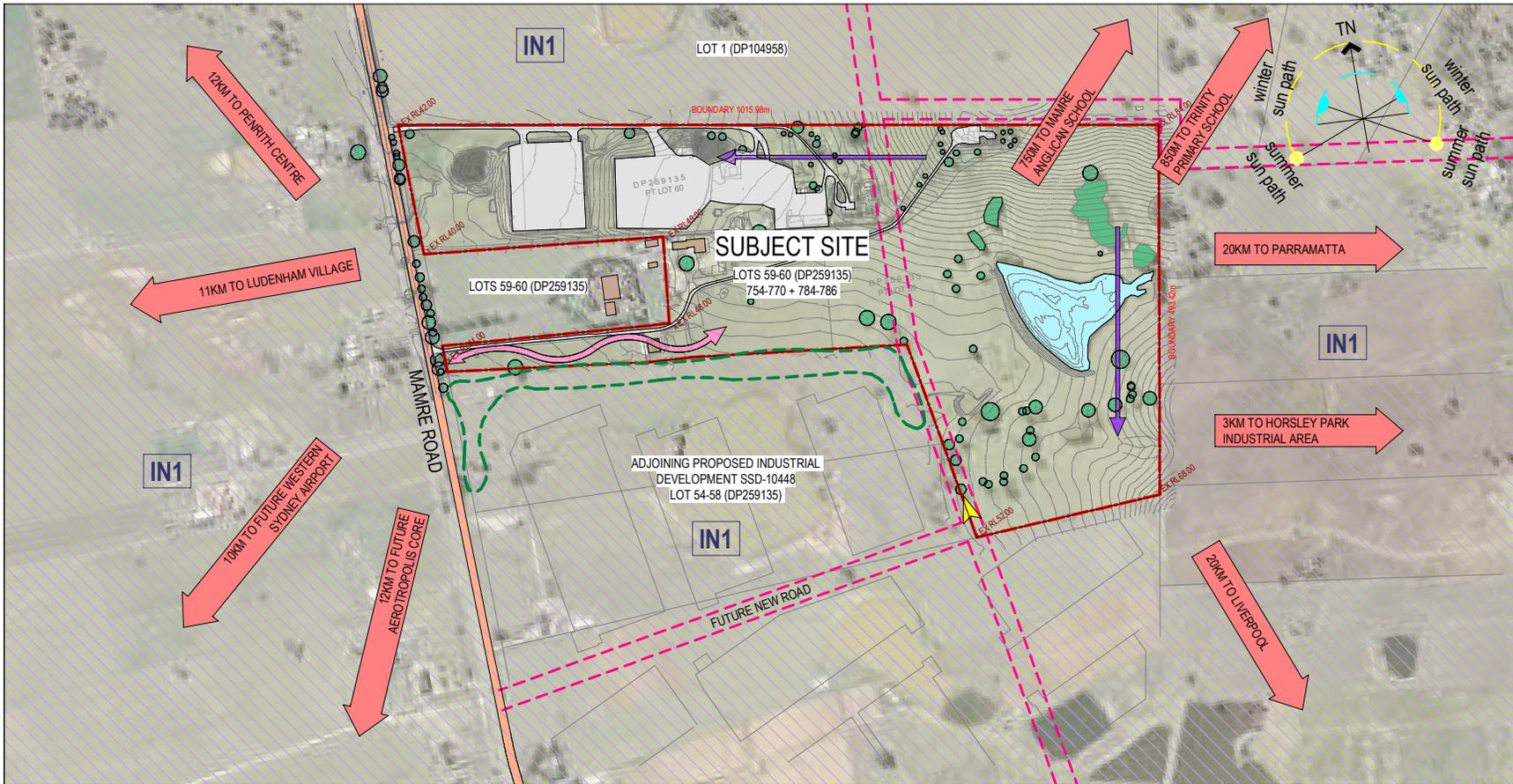
The site is in the suburb of Kemps Creek, located on the eastern side of Mamre Road as well as south of the proposed Southern Link Road. Kemps Creek is apart of the Penrith Local Government Area and has the population density of approximately 0.52 per hectare.

Within the 2-3km catchment radius, Erskine Industrial Park lies immediately to the north while Horsley Park Industrial Estate is located at the far east. Towards the south and west of the site consist of large expansive greenfield areas with low-level industry and rural residential properties. There are local schools and retirement village bordering the north of Kemps Creek. Mamre Road cuts through Kemps Creek and is the main spinal road to the precinct.

The site is roughly an inverted L-shape with a small frontage to Mamre Road. There are significant site falls in both the north-south and east-west directions. Currently, the site is largely vacant, though there is a small residential dwelling and some empty industrial pads that occupy the northern edge of the site. There is an existing man-made dam of roughly 13845sqm at the eastern boundary. Open pastoral landscape with sporadic groups of vegetation remains as the dominant feature of the site.



SITE PHOTOGRAPHS



OPPORTUNITIES

-  POTENTIAL ROAD ACCESS
-  FUTURE NEW ROAD AS PER MAMRE PRECINCT DRAFT DCP
-  EXISTING MAMRE ROAD
-  POTENTIAL CONNECTION TO MAMRE ROAD
-  ADJOINING IN1 (GENERAL INDUSTRIAL ZONE)
-  PROXIMITY TO PLACES OF INTEREST
-  ADJOINING PROPOSED LOCATION FOR RIPARIAN ZONE

CONSTRAINTS

-  EXISTING SITE FALL
-  EXISTING DWELLINGS
-  EXISTING WATER BODIES
-  EXISTING HARDSTAND + ROAD NETWORK
-  EXISTING TREES + VEGETATION
-  EXISTING LEVELS
-  ADJOINING FUTURE PROPOSED INDUSTRIAL DEVELOPMENT

 SITE ANALYSIS (nts)

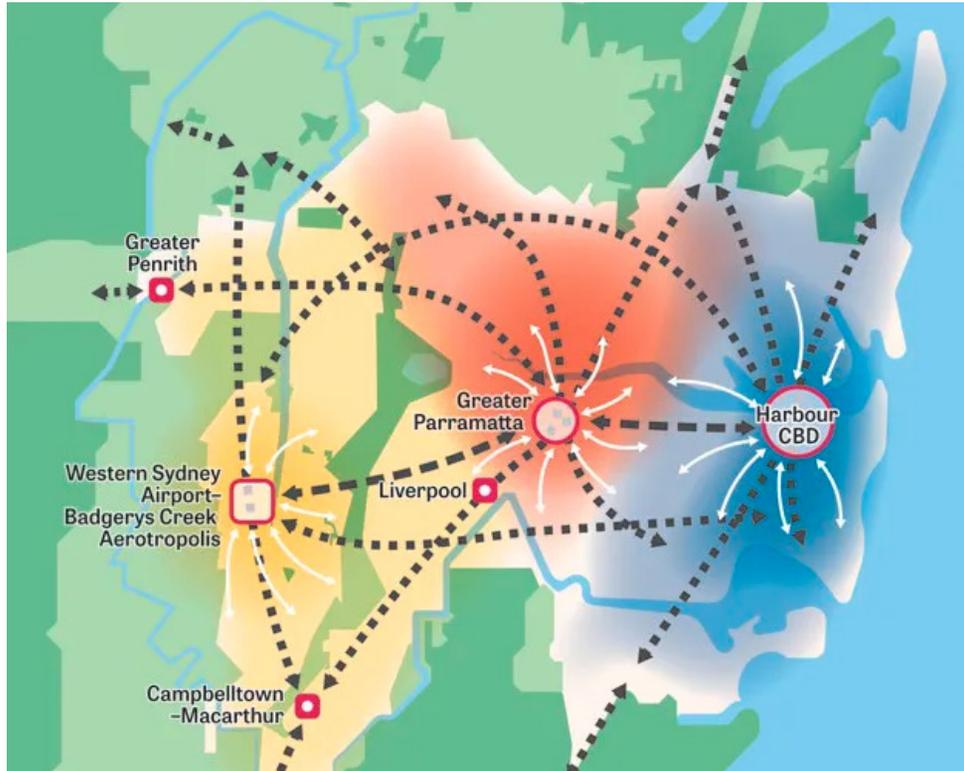
Redefining City 'Edge'

City edge has long been dominated with industrial developments. From inter-war years and post war period to early 1980s, Sydney industry expanded to occupy city fringe areas to access cheaper land, isolation from the population and water required by the industry. Over time, industrial areas become sporadic 'satellite' clusters that 'orbited' around Sydney edge. To this day, there is a strong segregation and distance between places for work and living.

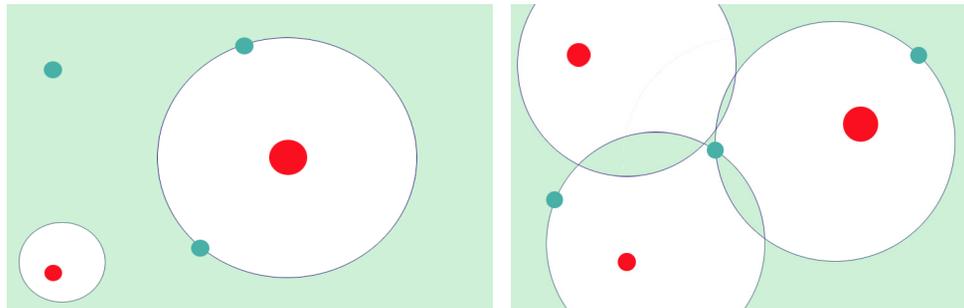
However, in recent decades, relationships between multiple major centres and borders that define them have altered. Firstly, **Western City District Plan** recognizes the increasing expansion of residential and mixed-use zones, particularly across Greater Penrith, that threatens the industrial and urban services land required for economic and employment purposes. Secondly, communities around the major centers need jobs and services close to home. There is a pressing need to retain employment land and create well-connected cities.

The proposed development is located in Kemps Creek area gazetted as Western Sydney Employment Area. Major centres such as Parramatta CBD, Penrith Town Centre, Luddenham Village and future Aerotropolis CBD Core falls within catchment of 10-20km to the subject site. With the proximity to major roads, this well located site coincides with the wider vision of 30-minute city that connects people to jobs, business, school and services as set out in **'A Metropolis of Three Cities'**.

Employment land serving multiple centres also means that the precinct no longer merely a place of work. People from different cities confluence at the city edge to work, meet and interact with each other. **'A Metropolis of Three Cities'** defines Great Places as public realm and open space that bring people together.



The 'metropolis of three cities' laid out in the Draft Greater Sydney Region Plan

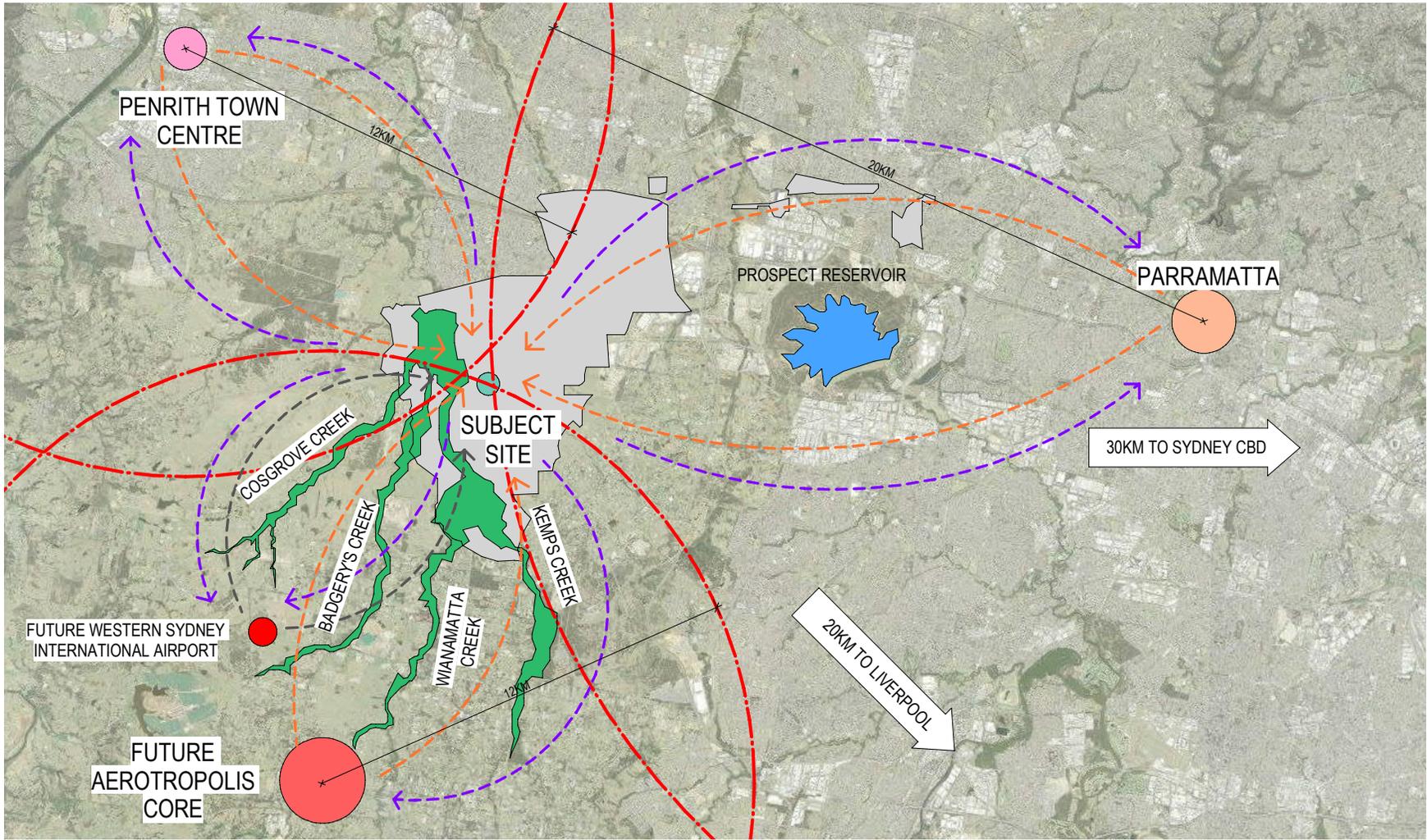


Traditional Model showing relationships between industrial areas and major centres

Recent Model showing relationships between industrial areas and major centres

LEGEND

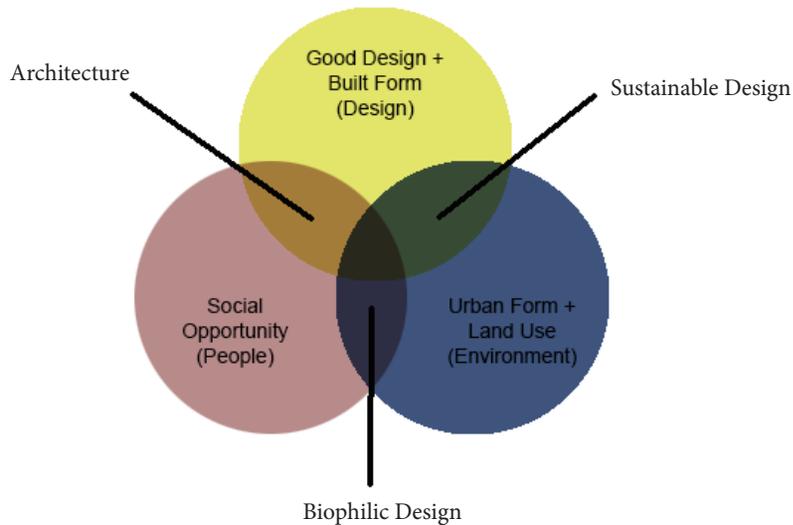
- city edge
- major centres
- industrial areas
- nature



LEGEND

PENRITH TOWN CENTRE	MAJOR WATER BODIES	WESTERN SYDNEY EMPLOYMENT AREA	
FUTURE AEROTROPOLIS CORE	FUTURE WSI AIRPORT	EXISTING SOUTH CREEK	
PARRAMATTA	SUBJECT SITE		

URBAN ANALYSIS (nts)



Architecture comprises of Social Opportunity and Built Form.
Architecture allows space for socialisation.

Sustainable design considers design and nature. It encompasses the Environmental Design.

Biophilic design is about the desire to be close to nature.

Diagram of Great Places + Elements of Place Making

It describes Great Places as well-designed built environment that are enjoyable, attractive, safe, clean and flexible with a mix of sizes and functions. The city edge, previously segregated from centres, now not only bring jobs closer to where people live but also create socially connected communities within healthy work environment.

This new city edge condition provides a new mode of thinking in the architecture conceptualisation of Yiribana Logistics Estate. The idea of 'edge' that unifies establishes potential new relationships between two opposing binaries that may be otherwise be segregated. Creation of relationship opens up possibilities which are paramount to the place making as suggested in Great Places.

Great Places in 'Metropolis of Three Cities' defines 3 essential elements in providing a sense of place;

- **Good Design+ Built Form**
- **Urban Form + Land Use**
- **Social Opportunity**

At first glance these elements appear to be distinctive from one and another. However, when we apply the logic of the 'unifying edge', these elements reveal 3 types of relationships such as **architecture, sustainable** and **biophilic** design. Therefore, instead of approaching the design centering on the users only, design considerations include dialogues between built form and people, people and environment, and environment with built form.

Architecture that responds to the changing landscape of industrial development and contributes to the place-making, is the underpinning design of Yiribana Logistics Estate.

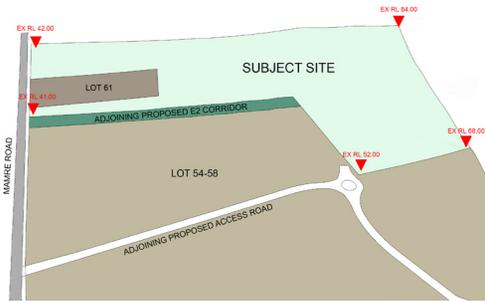


Diagram 1: Context

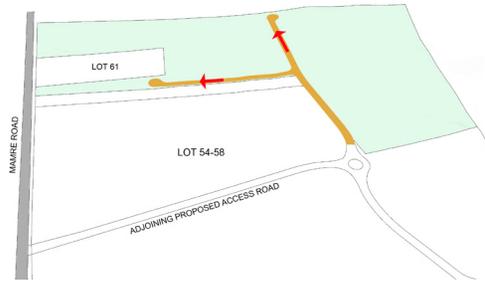


Diagram 2: Establishing Access

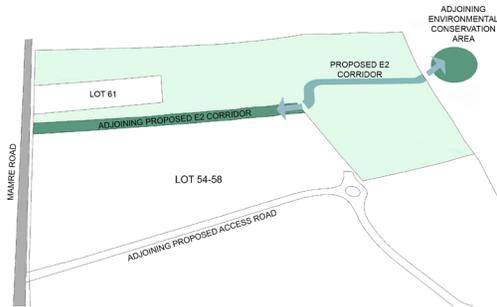


Diagram 3: Connecting E2 Corridor

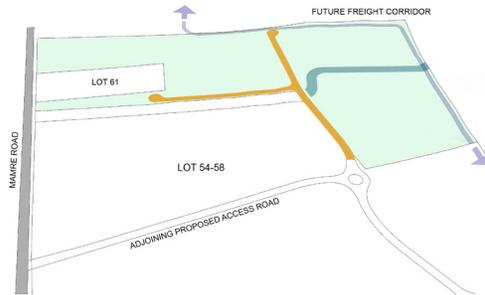


Diagram 4: Provision for Future Freight Corridor by 'Others'



Diagram 5: Warehouse Stepped down in accordance with existing levels



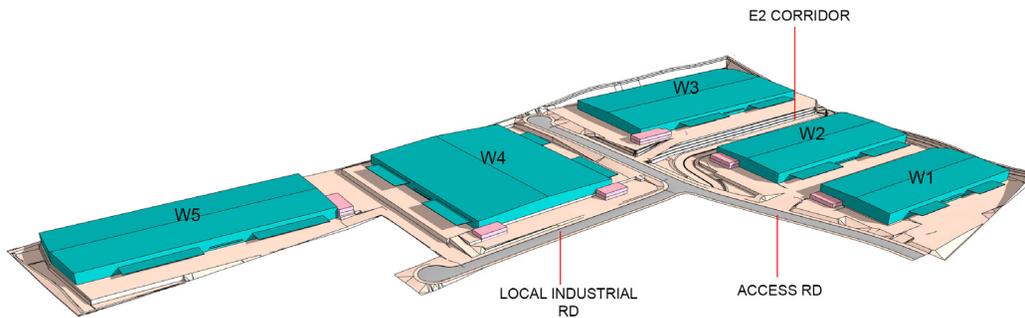
Diagram 6: Activation via Ancillary Offices + Hardstands

The Proposed Development

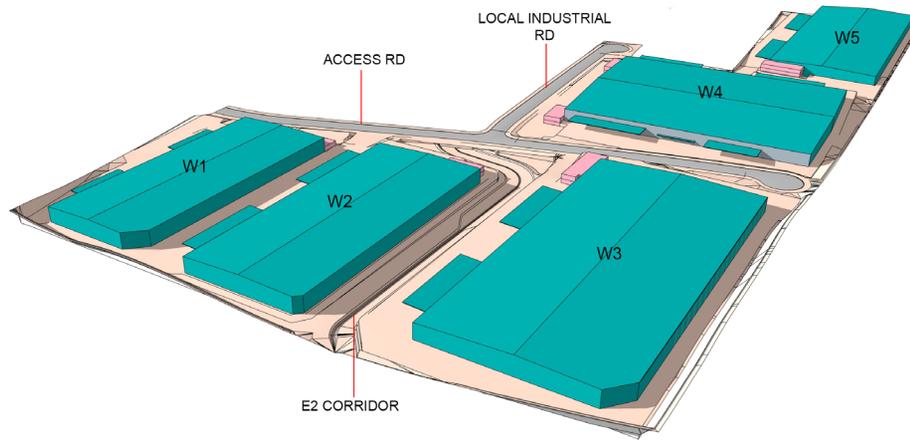
The proposed Concept Masterplan consists of five (5) warehouse facilities, with a total of approximately 151,125sqm of warehouse floor space and 6,735sqm of ancillary office floor space.

Street Network, E2 Corridor + Freight Corridor

- Main vehicular access to the development is via Access Road connecting to the intersection from the south in Lot 54-48
- The Access Road extends north and divides the site into 2 major sections; eastern site with 3 warehouses and western site with 2 warehouses
- Access Road: 16.2m wide carriageway allows for Pedestrian & Cycle Path with Nature Strips on either side as per Mamre Road Precinct Draft DCP
- Linear Environmental Corridor of 35m wide runs between Warehouse 2 and 3, connecting neighbouring Environmental Conservation area in the east to the adjoining south-western development's E2 Corridor (Lot 54-48)
- The east-west bound Local Industrial Road has been integrated with the Access Road to provide convenient access to Warehouse 4 and 5.
- Local Industrial Road: 15m wide carriageway with pedestrian paths and nature strips on both sides
- Proposed roads 'wrap' around the shared south west corner boundaries to adjoining Lot 54-48, reinforcing the public domain edge of the development
- There is a provision for Future Freight Corridor of 10m along the edge of eastern boundary + part of northern boundary by 'others'



Massing: Aerial View from Southwest



Massing: Aerial View from Northeast

Proposed Built Forms

- Warehouse facilities generally 'stepped' down north-south and east-west directions to respond to site falls
- Shorter façades of warehouse orientated to face Access Road, presenting smaller scale of built forms and reducing visual bulks to public road domain
- Diversified built forms with differing scales create a more desirable estate
- Better interface with riparian corridor as Warehouse 3 hardstand is parallel to the Riparian Corridor, establishing an active frontage and surveillance to the said corridor
- Integration of freight corridor with built forms in response to Draft Mamre Precinct DCP, creating opportunity to connect with future Western Sydney Aerotropolis as one of the Integrated Logistics Hubs
- Ancillary offices positioned along the visible frontages of Access Road to activate the public interface
- The proposed concept masterplan utilises landscaping and urban design features to compliment biodiversity values and intergrate built forms with nature
- Along Access Road, the minimum building setback is 12m inclusive of 6m landscape zone as per Mamre Road Draft DCP. However, due to the curves of the road and the existing levels, generous setbacks are provided to allow for more landscaping opportunities
- Building setbacks within the estate fronting the Local Industrial Road are at 7.5m inclusive of 3.75 landscape setbacks
- Warehouse 5 is setback at 20m along Mamre Road with dense planting of trees to screen the built forms beyond
- There will be parking provisions of 717 cars across the estate in accordance with the Mamre Road Precinct Draft DCP



11am



12pm



1pm



2pm

LEGEND

- Building Envelope
- Environmental Corridor
- Public Road

Proposed Landscape Strategy

In line with the Sustainability Framework stipulated in **Western City District Plan**, the development implements several sustainable design initiatives as follows;

- 2 locations are reserved as bio-retention basins to manage water run-offs and treatment for onsite storm water detention
- landscape strips lined the road network with varying widths in accordance to the road order to establish hierarchies and wayfinding
- Screen planting is proposed to car parking, hard-stands and building to soften built forms and reduce perceived bulks
- Generous setbacks are dedicated for canopy trees to grow to maturity, which forms part of the proposed network of green spaces within the estate
- Each lot will have dedicated rainwater reuse tanks for purpose of irrigation and toilet-flushing
- Native shrubs and ground covers provide buffers to breakout spaces while allowing optimised views to the landscape areas beyond
- Buildings are setback from the proposed Riparian Corridor to minimise impact of overshadowing to the environmental area

SHADOW DIAGRAMS, WINTER SOLSTICE 21 JUNE

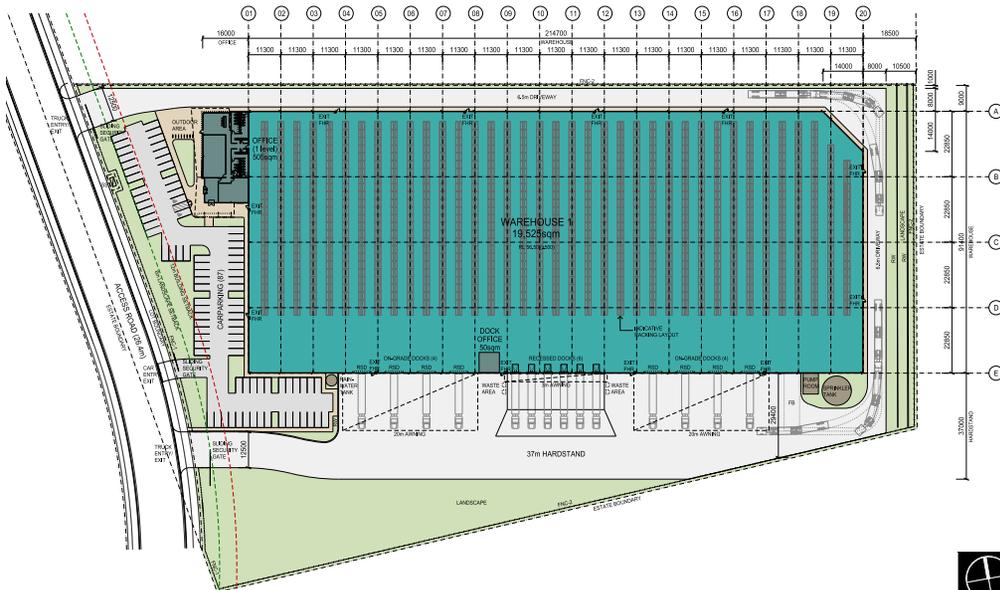


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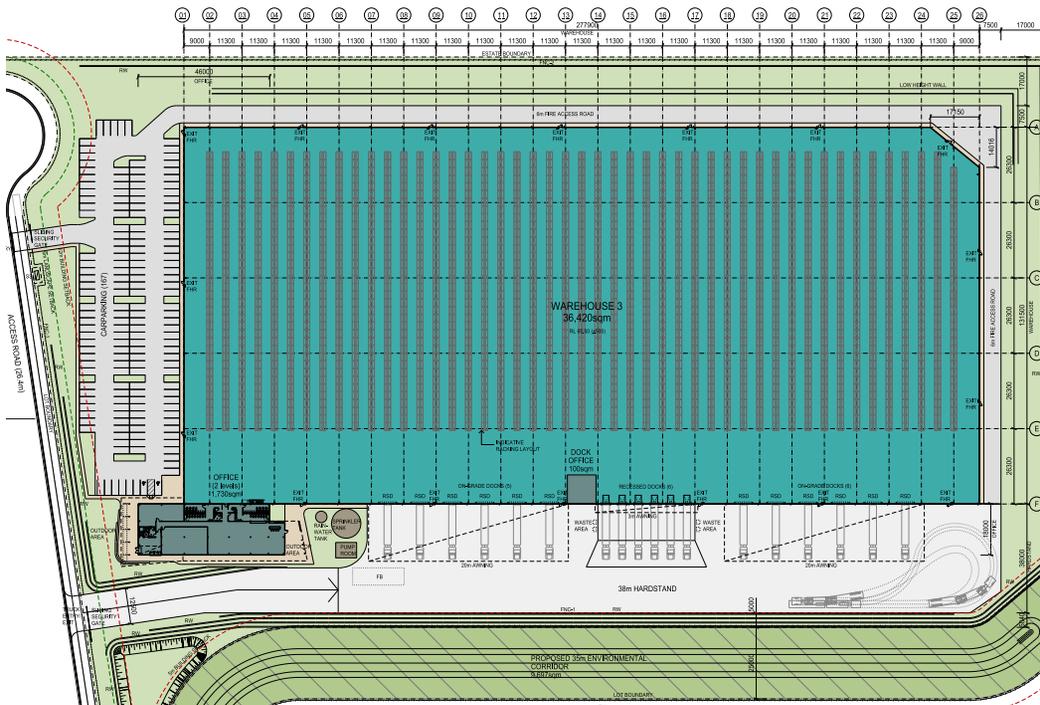
- LANDSCAPE SETBACK
- BUILDING SETBACK
- RW RETAINING WALL
- FS FIRE SERVICES
- FB FIRE BRIGADE TRUCK
- SS SUBSTATION

ESTATE MASTERPLAN (nts)

STAGE 1 DEVELOPMENT



SITE PLAN OF WAREHOUSE 1 (nts)



SITE PLAN OF WAREHOUSE 3 (nts)

Design Statement – Yiribana Logistics Estate

Stage 1 Development

Stage 1 Development includes;

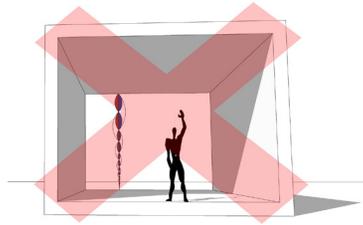
- Lot 1 with an area of 80,978sqm
 - Warehouse 3 which has an area of 36,420sqm
 - 2 storey office of 1,730sqm
 - 167 parking spaces
 - Riparian Corridor of 9,697sqm
- Lot 2a with an area of 40,009sqm
 - Warehouse 1 which has an area of 19,525sqm
 - single storey office of 505sqm
 - 87 parking spaces

Cars and trucks access to each lots are separated for safety and functionality as part of the development proposal. Both Warehouse 1 and 3 buildings are setback from Access Road. The setbacks provide spaces for the feature landscaping at the entry of the lot and car park area to instil a sense of arrival. Additional setback of 5m to each side of the Riparian Corridor is applied for planting and revegetation in accordance to the Ecologist.

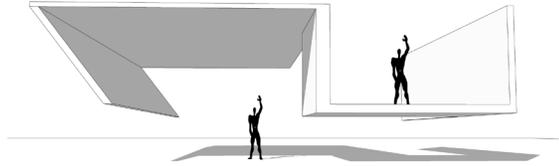
The height, bulk and scale of the buildings have been developed to meet the market requirements and is consistent with other industrial typologies in the surrounding areas. Office components are typically positioned at corners of warehouses as landmarks to define entry points and provide for vantage point towards the Riparian Corridor or distance views. Design considerations are well integrated into both office and warehouse to articulate facades and reducing perceived bulk forms, resulting in a coherent form.

Loading areas to both warehouses are positioned away from the main road and are screened with vegetation screening. This is consistent with 4.2.4 Building Design of Mamre Road Precinct Draft DCP.

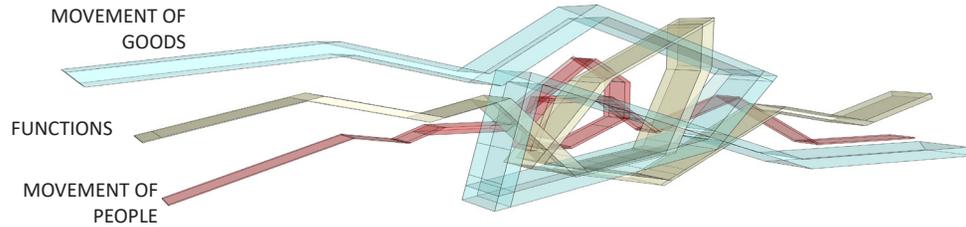
BOUNDING EDGE



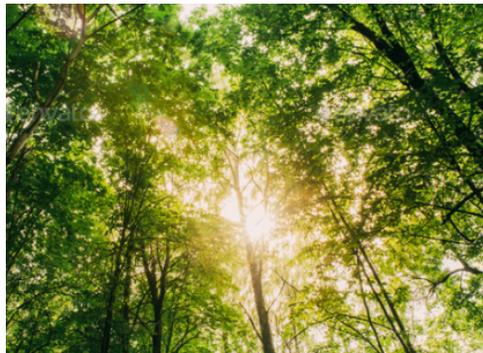
FOLDING EDGES



FRAMING OF SPACES VS RE-FRAMING



CONCEPT IDEA OF PROGRAMMATIC DISTRIBUTIONS



INSPIRATIONAL IMAGES FROM SURROUNDING CONTEXT

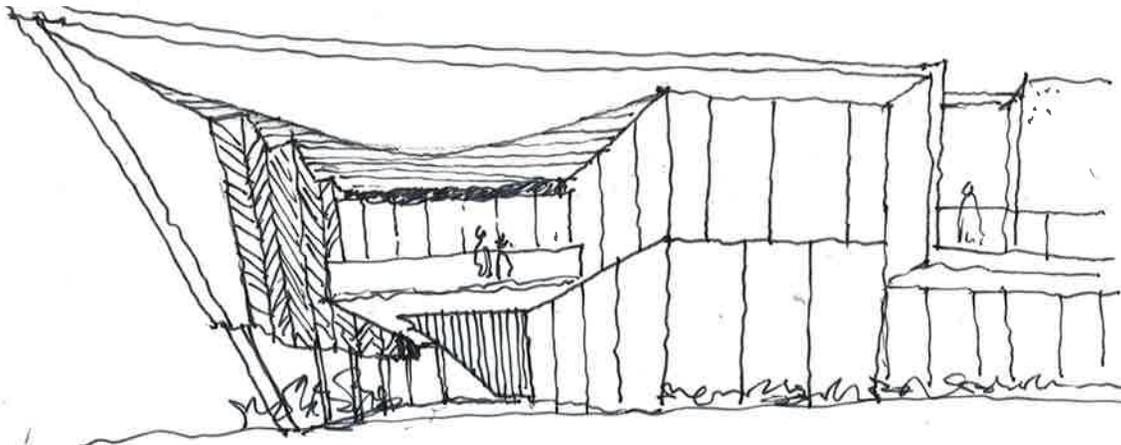
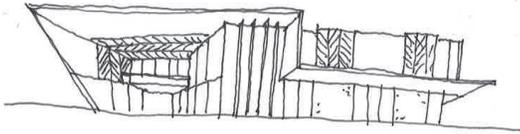
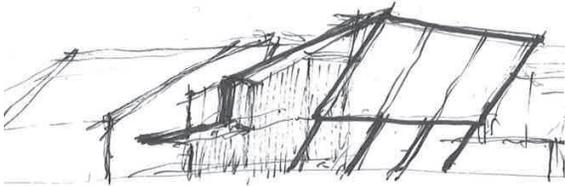
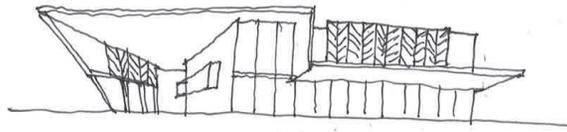
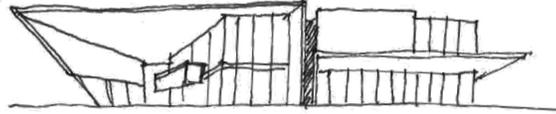
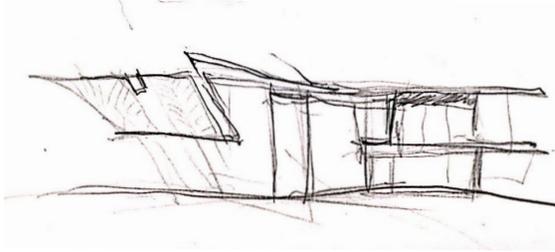
The Concept

The architecture of Yiribana Logistics Estate is a response to the changing landscape of industrial areas at the edge of cities as discussed on page 14. Establishing relationships between built forms, people and environment are integral to the place making process of this project. Moving away from the traditional notion of inward-looking spaces framed by edges, the design seeks to 're-frame' spaces by expressing the movements that overlap and interconnect between indoor and outdoor spaces. The edge is no longer just an enclosure, but an environment of inclusion whereby people can interact with nature.

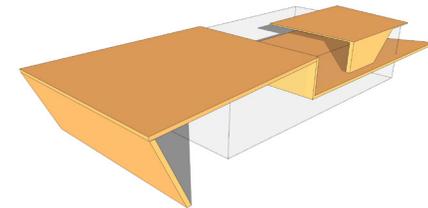
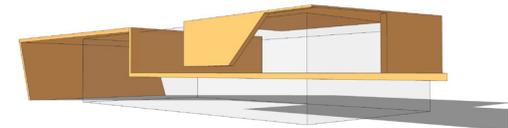
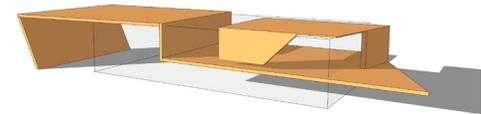
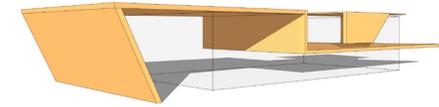
The design component of the office epitomizes this idea of reframing the edges. In this instance, the edge is expressed in the form of roof plane. Going beyond its functional intent as a mere shelter, the profile of feature roof plane changes in accordance with the programmatic functions, resulting in a sculptural form. It choreographs volumetric spaces by folding and unfolding continuously to become feature screens, wall and awning to the spaces it defines. Throughout the office, natural light is optimised, filtered and sculpted, instilling a sense of poetic passive design.

The existing natural landscape of Cumberland Plain Woodlands or River-Flat Eucalyptus Forests have been the source of inspiration to the biophilia design of the buildings. Leaves patterns are abstracted and translated into motifs for the feature wall to warehouse facades and the brise soleil for the office. Such integration of indirect natural elements to the warehouses and office components allow articulation of built forms and blending of development with the surrounding context as a cohesive estate.

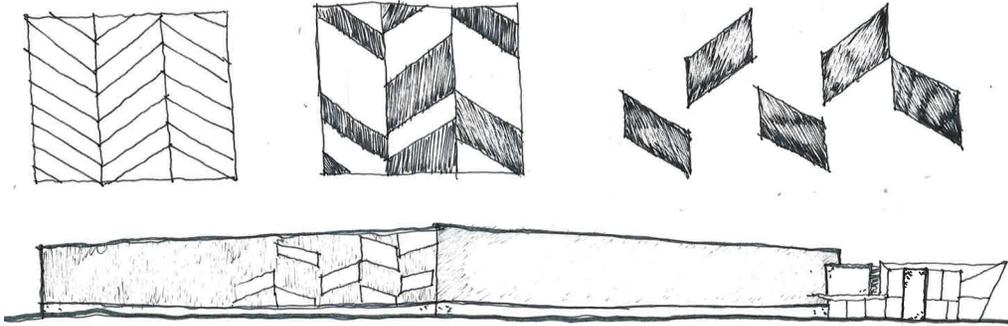




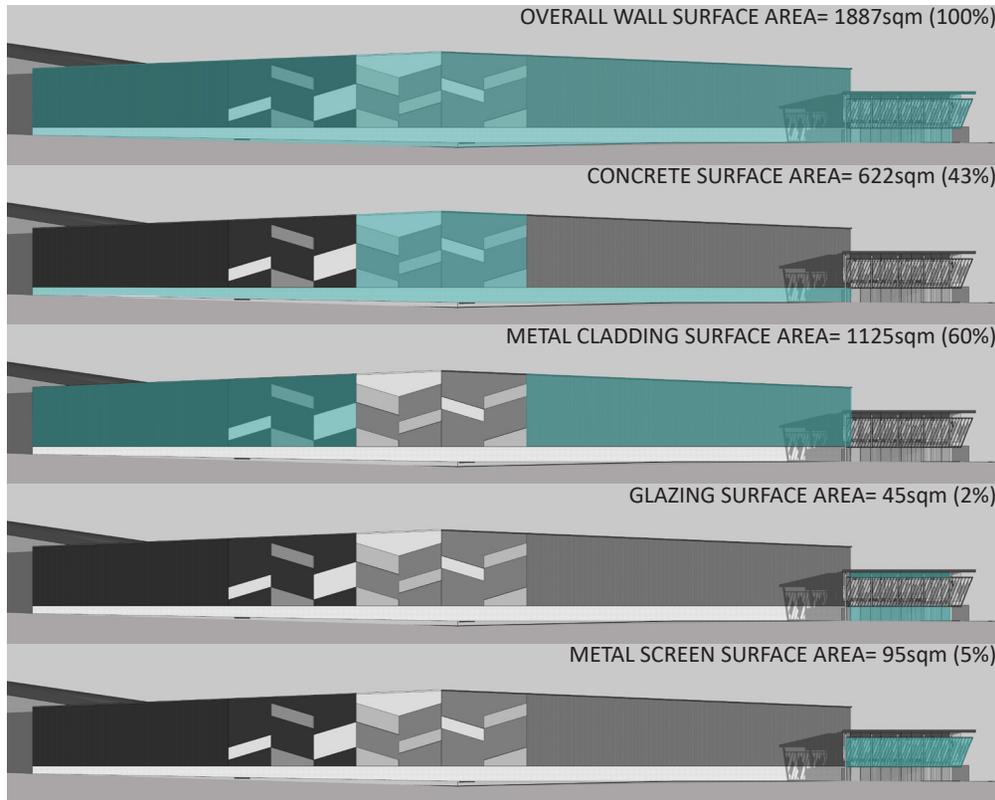
EXPLORATION OF CONCEPT SKETCHES



PROTOTYPE STUDIES OF FOLDING PLANES



DESIGN OF MOTIFS + FEATURE WALL OF WAREHOUSE



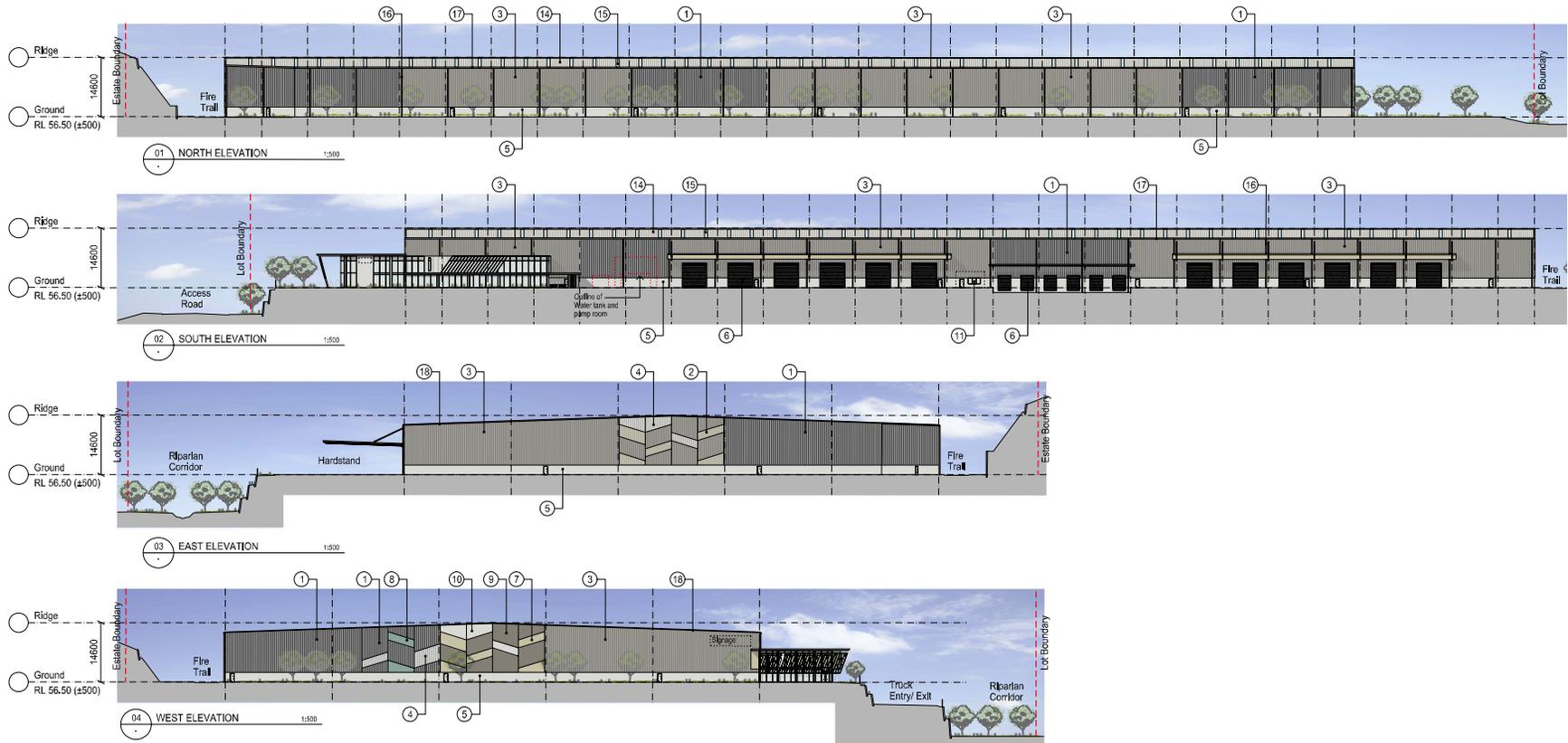
SURFACE AREAS OF CONSTRUCTION MATERIAL TO WAREHOUSE 3 FACADE FACING ACCESS ROAD

Warehouse 1 + 3 Design

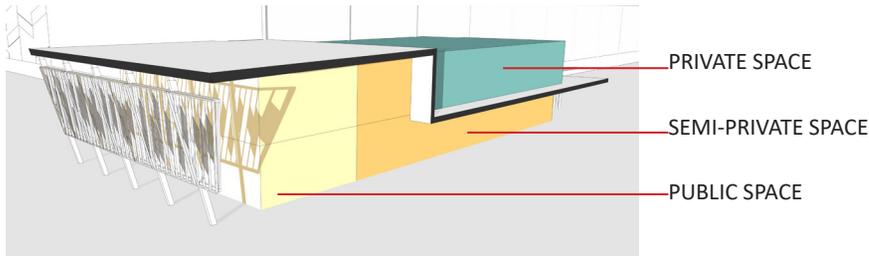
Set within the the abundant landscaping area screened with trees, Warehouse 1 and 3 facades are accentuated with interplay of colours and material pallettes. Feature wall design is inspired by patterns deeply ingrained in nature, further reinforcing the development with its unique site and sense of place. Concrete datum lines the base of the warehouse and anchor the built form. In counterpoint with the concrete is the lightweight metal cladding and roof encompassing the remaining body of the warehouse.

The design of the warehouse aligns with the following architectural design guidelines stipulated in 4.24 Building Design, **Mamre Road Precinct Draft DCP**;

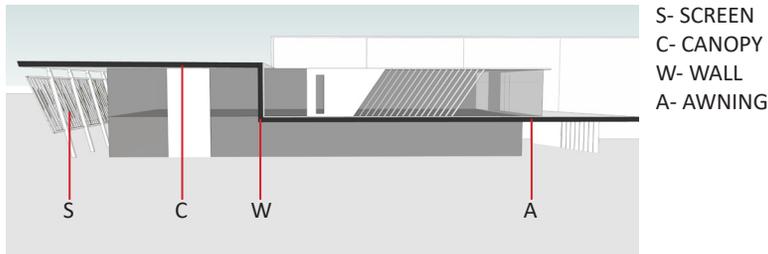
- Feature wall to gable end front main road as visual interest, utilising textured surface treatment
- Material for used on warehouse facades have low reflectivity
- Shorter profile of gable ends fronts the public road domain, making the development highly visible from the public areas without being too bulky in form
- The said gable end is also juxtaposed with the office component located at the corner, enhancing the building interface and provide for varied streetscape
- Skylights are incorporated into the roof oto allow natural lighting into the warehouse
- Solar panels are located on the roof facing north as part of the energy efficient design strategies
- There are roughly 46 % of metal cladding wall, 60% of concrete wall, 2% of glazing and 5% metal screen that dominate the main facade facing access road.



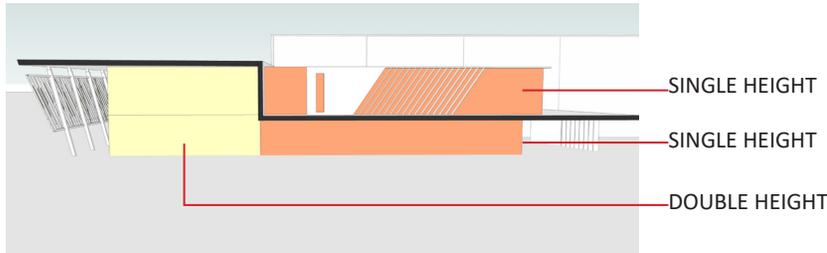
WAREHOUSE 3 ELEVATIONS (nts)



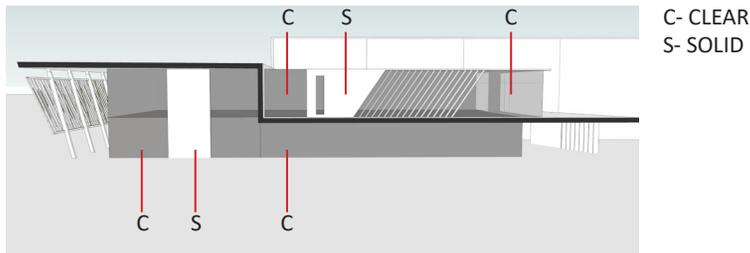
SPATIAL QUALITIES



TRANSITIONING OF ROOF



VOLUMES + HEIGHT



RHYTHM

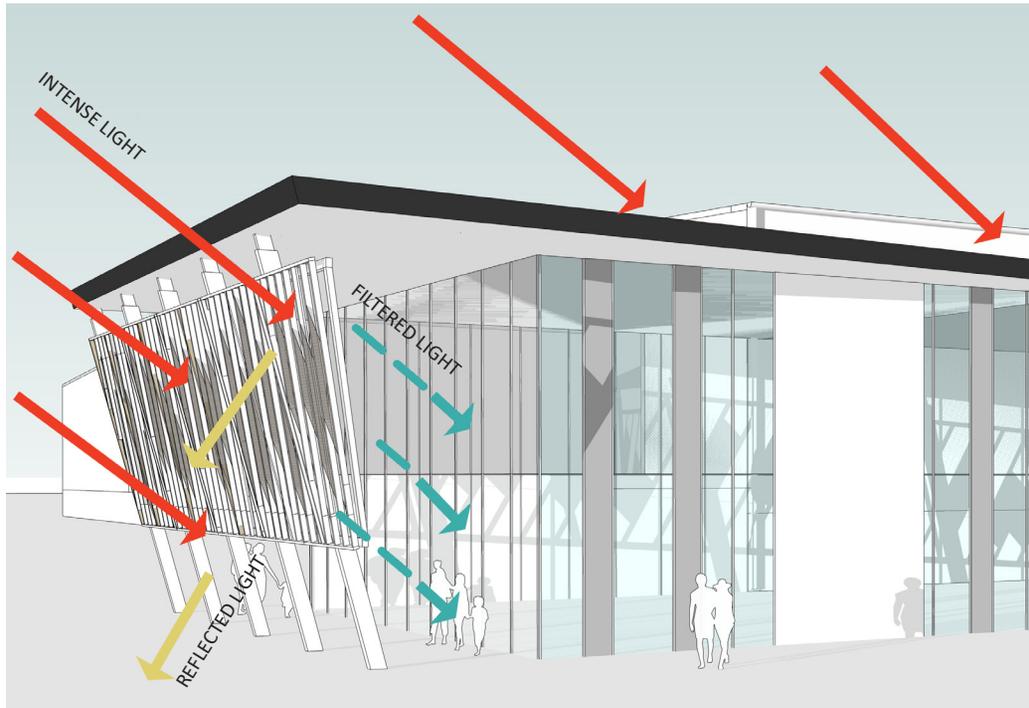
Office Design (Warehouse 1 +3)

Intended as the fundamental focal point to the development, the office component considers the nexus of architecture, sustainable and biophilia design in response to the context. These design approaches are further elaborated in the discussion below.

Architecture

The spinal circulation through the building ties public, semi-public and private functions in a highly legible simple geometry. The indoor lobby consist of a double-height volume with excellent access to natural light protected by high-level roof canopy and feature screen. Users are able to over-look into the lobby from the breakout space on level 1, reinforcing the idea of communal space. The height varies and steps down from the entrance, accomodating a 2-storey open plan office space and lower scale but intimate communal lunch room area on ground level. Each spaces extends into the landscape through canopy and awning, creating a continuous verandah around the building.

Within the shade of the roof and feature screen, the outdoor foyer space greets visitors and workers alike upon arrival. Community activities and natural spill of activity from within the office can take place in this open foyer space, and at the same time inviting the landscape into this domain, reflecting intense natural sunlight and shelter in a way that is directly inspired by eucalypts.



PASSIVE DESIGN VIA FEATURE BRISE SOLEIL



FEATURE WALL + BRISE SOLEIL DESIGN INSPIRED BY PATTERNS FOUND IN NATURE

Design Statement – Yiribana Logistics Estate

(Issue A)

Sustainable Design

The use of feature brise-soleil, projecting roof and blade louvres is integral to the passive design of the office. Sunlight is filtered and deflected to minimise heat gain and loading on air-conditioning in the building, thereby reducing the carbon footprint. Blade louvres are placed strategically to provide privacy to office space without compromising views to outside and natural lighting. The building cooling strategy via sun shading mechanism helps improve the temperature overall while optimising views, making the interior a more comfortable experience to the users.

Biophilia Design

The design of the shading device seeks to establish a contemporary sense of place, providing an inviting architecture with a strong connection to its setting. Perforated mesh lined the diagonal blades of the feature screen fronting the outdoor foyer and indoor lobby, creating a special ambience both day and night. The exquisite mix of blades and perforation give rise to a variety of lighting patterns, depending on the time of the day and the angle of sunlight. During the day, the beams of sunlight seek path through the imaginative perforated mesh placed in a random fashion, giving rise to an interesting array of shapes in the space, reminiscent of shades when under trees. During darkness, fascinating lights and shadows penetrate to the outside.



VERTICAL + DIAGONAL BLADES AS SUN SHADING DEVICE



WESTERN VIEW OF WAREHOUSE 1 OFFICE



SOUTH-WESTERN VIEW OF WAREHOUSE 1 OFFICE

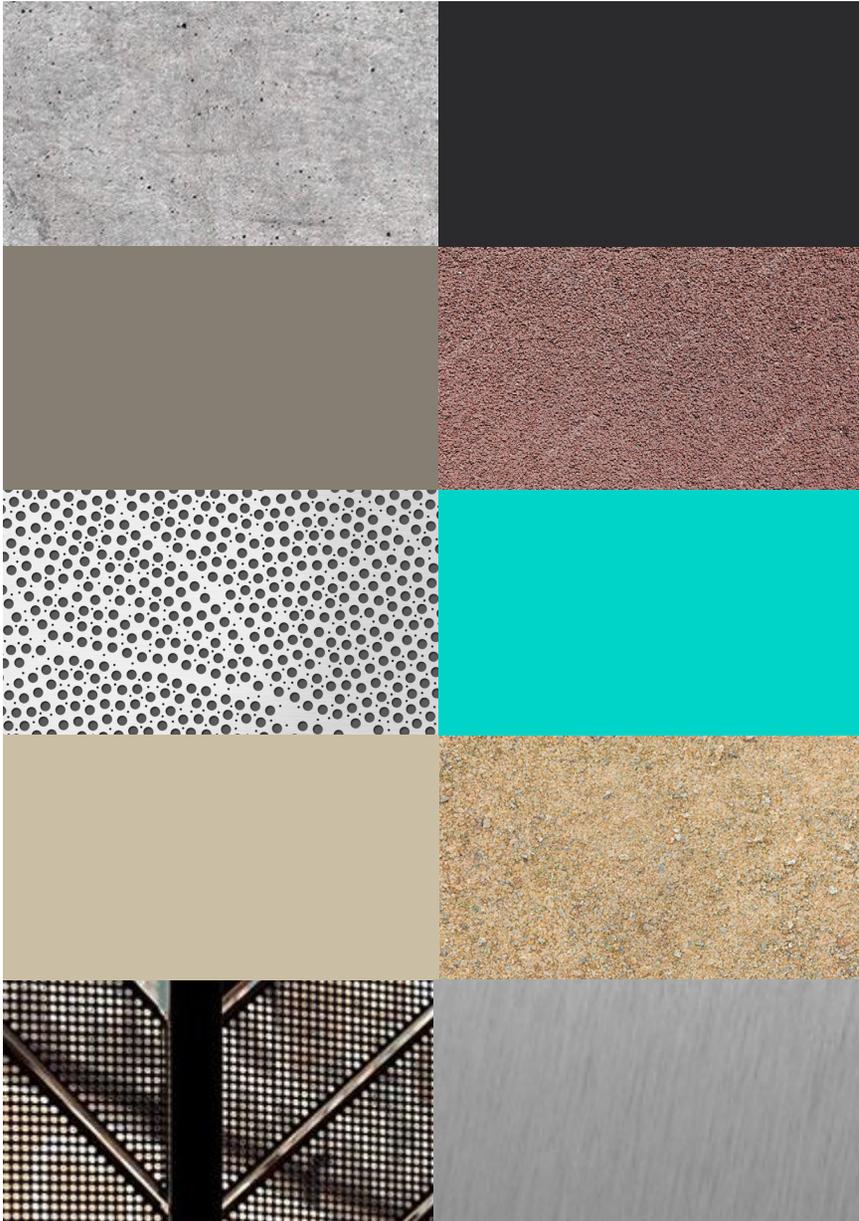
The design of the office is consistent with the following architectural design guidelines stipulated in 4.24 Building Design, **Mamre Road Precinct Draft DCP**;

- the scale of the office is reduced by utilising awnings projected over footpaths, roof eaves that project beyond external walls and colonades along the outdoor foyer and breakout areas
- entrance to the office is defined with feature brise soleil
- Strong projecting canopy of the office relates well to the expansive warehouse canopies, while the office brise soleil shares similar design patterns with the feature wall of the warehouse
- Roof profile of the office is sculptural in form, providing visual interest and variation to the streetscape
- transitions between entrance, office spaces and warehouse are readily identifiable with the careful variation to roof heights
- office facade has more than 30% glazing facing the main road and entry points, strengthening passive surveillance and establishing streetscape character
- the offices will incorporate a diverse range of textured materials to celebrate the sense of arrival and promote use of external foyer and shaded breakout areas for the office population.

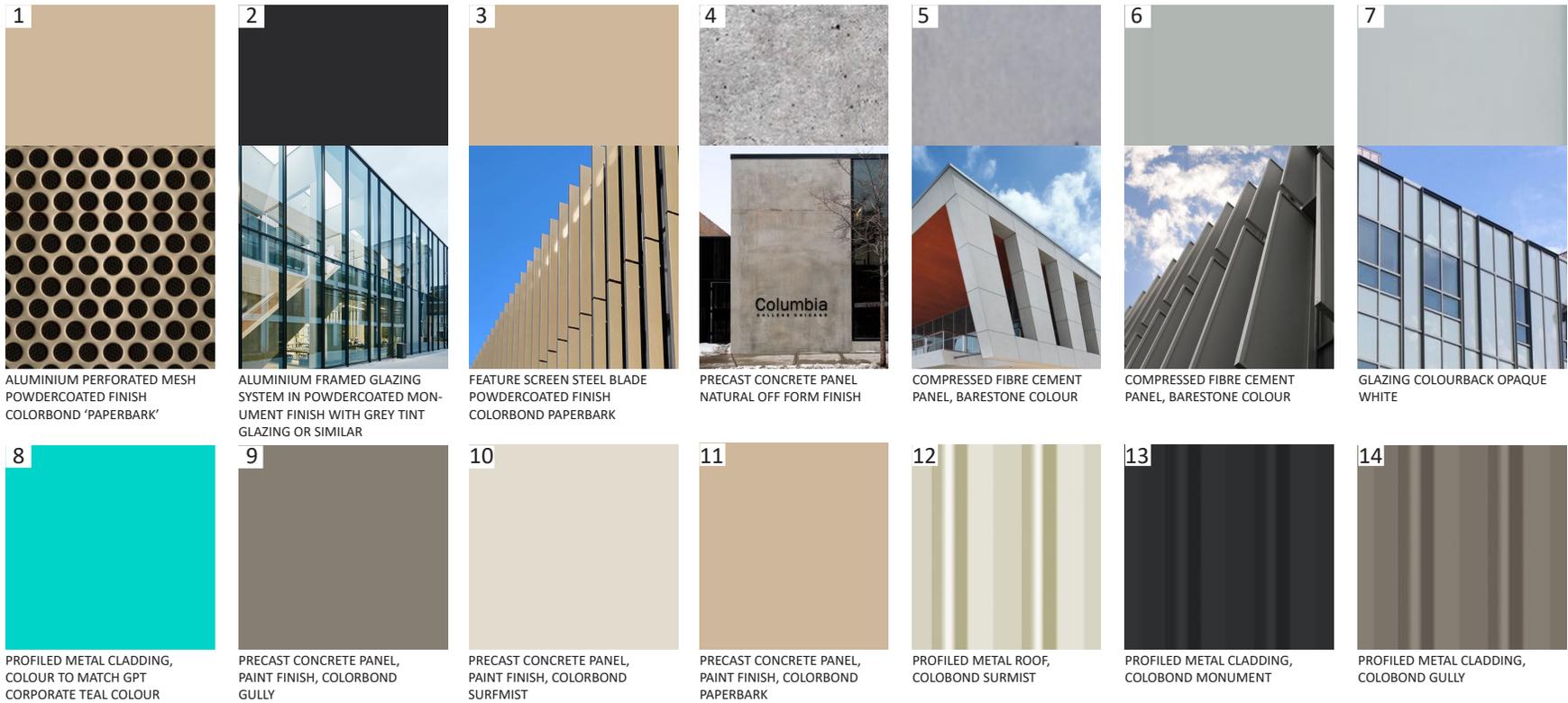
Materiality and Colour Palette

The overall design scheme of Yiribana Logistics Estate aim at representing a contemporary and yet elegant architectural expression that celebrates GPT's corporate vision, the users and engage the natural environment of Kemps Creek.

- Overtly dark colours are used sparingly to avoid excessive heat absorption to the building.
- Careful orchestration of colours are applied throughout the building to reveal entries and denote programmatic functions
- Colours are generally restrained in tone to allow the development to 'sit' quietly with the landscape, complementing the context
- Mixed interplay of colours, particularly highlights using GPT's corporate colours, are used on the highly visible facade to create visual interest and break down perceived bulk forms of the development
- Use of natural off-form concrete and concrete-looking finishes to balance the overall warm colours
- Durable and cost-effective materiality offers a timeless aesthetic instead of following the flux of fashion



SELECTION OF COLOUR PAlettes INSPIRED BY EXISTING LANDSCAPE + CORPORATE COLOURS



COLOUR + MATERIAL FINISHES OF WAREHOUSE 3 (TYPICAL TO ALL WAREHOUSE)



PERSPECTIVE VIEW OF WAREHOUSE + OFFICE 3