Proposed Industrial Development

42 Raymond Avenue, Matraville

Hale

HALE
Design Report

SBA ARCHITECTS

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EXECUTIVE SUMMARY

THE SITE
The site is situated at 42 Raymond Avenue, Matraville, approximately 14 kilometres south of the South CBD. Strategically located with relative proximity to Port Botany and Sydney Airport, the site is well connected via Botany Road and the M1 Motorway. The area is a well established warehouse and industrial precinct, with the proposed development well suited to the local context.

THE OPPORTUNITY
The site offers a rare opportunity of scale in the precinct to showcase quality architectural design within the industrial sector. Its location within the Three Port SEPP, encourages efficient redevelopment for port and industrial related uses and does not provide any height limits.

THE PROPOSED DEVELOPMENT
The proposed development comprises of multiple warehouse and office mezzanine spaces, which will create a large amount of employment within the area. With the introduction of additional landscaping and amenity into the site, a more attractive work environment will be created for the staff as well as an enhanced public domain.

PROJECT DETAILS
Construction of a two-storey warehouse and distribution centre comprising 19,460 sqm GFA including ancillary office space, landscaping, bicycle and car parking:

- 17,789 sqm of warehouse and distribution GFA; and
- 1,671 sqm GFA ancillary office space.
- Provision of 11 bicycle parking spaces, 6 motorcycle spaces and 101 car parking spaces at ground.
- Approximately 2,250 sqm of hard and soft landscaping at ground.
- Provision of one additional access crossover from Raymond Avenue.
- Provision of internal vehicle access route and loading docks.
- Upgrades to existing on-site infrastructure.
- Building identification signage.
- Operation 24 hours per day seven days per week.

SEAR's (Secretary's Environmental Assessment Requirements)is a guide to control the architectural quality of urban and built form design. Consideration of their requirements is crucial in designing proposals that positively respond and impact the surrounding environment.

The proposal therefore aims to meet the criteria of SEAR's item 4 Built form and Urban Design, to achieve a high quality architectural response. Throughout the design statement each area will highlight and address different criteria relating to the SEAR's guidelines.

BUILT FORM AND URBAN DESIGN

1 Explain and illustrate the proposed built form, including a detailed site and context analysis to justify the proposed site planning and design approach.

Page 4 - Urban context analysis map addressing the appropriateness of the building function within the site.
Page 5 - Site Surrounding & Thermal Condition analysis map addressing the relationship of the building to immediate surroundings and site conditions.
Page 6 - Street character analysis of proposed building within existing site and relationships with existing streetscape.

2 Demonstrate how the proposed built form (layout, height, bulk, scale, separation, setbacks, interface and articulation) addresses and responds to the context, site characteristics , streetscape and existing and future character of the locality.

Page 7 - Tree removal for proposed development to achieve primary design objective
Page 8 - Design Response identifying key moves in the layout of the site plan in response to limitations, setbacks and constraints of the existing site.
Page 10-13 - Massing Strategies analysis exhibits the breakdown of key components of the design and how they respond to site constraints. It also illustrates the design process and shaping of the built form.
Page 14-15 - Urban design and visual impact of the proposed development and how the design relates to the surrounding context.
Page 17 - Shadow Diagrams analysis to show the built form massing impact on shadowing and visual impact of the surrounding site and existing buildings.
Page 18 - Perspective Section to understand the inner layout and movement through the massing, as well as a 3D view of the

3 Demonstrate how the building design will deliver a high-quality development, including consideration of facade design, articulation, materials, finishes, colours, any signage and integration of services.

Page 9 - Precedent analysis to show the extraction of high-quality architectural elements used in a responsive way to thermal and site conditions.
Page 16 - Preliminary Material Proposal to exhibit a careful selection of complimentary colours and high quality architectural textures and material finishes.
Page 19 - Elevations to display the application of the materials and finishes into a unique warehouse patterning and aesthetics and functional office facade.
Page 20-25 - Rendered perspectives to give a realistic outlook of the proposed development from both street views where

ARCHITECTURAL STATEMENT

BETTER PLACED OBJECTIVES

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'Better Placed' is an integrated design policy organised by the GANSW (Government Architects New South Wales). It is a set of seven objectives that aims to set aspirations and expectations for designing a built environment of high quality architecture and public domains for work and lifestyle.

The policy has a focus on providing good architecture which promotes amenity as well as and emphasis on sustainable management of built and cultural heritage. Our design was developed through the consultation of these seven objectives and is evident in this design report.

BETTER FIT	BETTER PERFORMANCE	BETTER FOR COMMUNITY	BETTER FOR PEOPLE	BETTER WORKING	BETTER VALUE	BETTER LOOK & FEEL
The analysis of the design showed the site was within an industrial precinct of Randwick, with the immediate surrounding buildings being of a similar function to the proposed development (Pages 4-7). The building is orientated and positioned appropriately in a response to thermal conditions and to efficiently maximise the built environment potential	The proposal is developed within the existing constraints of the site and those developed from the site analysis (Page 8) In addition to this the design has an emphasis on sustainable systems. The use of a functional solar protective facade is implemented as a passive cooling system, and an allocated area on the roof dedicated to a solar PV cell arrangement (Pages 12 &13).	Although typically industrial developments are not public spaces, we have designed towards the community by maximising the landscaped areas of the site (Page 8). We have incorporated new landscape into the ground floor with a variety of native species to enrich and soften the building. We have portrayed this through photo realistic 3D renderings to give an idea of the impact of this green space for the community (Pages 17-23).	Aligned with the policy for GANSW, the built environment requires an emphasis on safe, accessible amenity space. Therefor in addition to the ground floor landscape areas, we have also introduced shared raised open spaces for each of the office blocks (Page 11). This will allow for a better work environment for the users of the building.	The massing has been carefully articulated to maximise the potential function of each warehouse and office in accordance with the limitations (Pages 10-13). A clear system for pedestrian and vehicle circulation has been established, and it will allow for the building to operate with efficiency and safety (Page 8).	The massing has been split into two tenancies, allowing for co-working properties between clients. This will create a better working precinct within the site and add more value to the surrounding area (Pages 10-12). In addition to this each tenancy has the potential to be split to create 4 warehouses with ancillary offices. This will allow for a higher staff employment and job opportunity (Pages 16).	A selection of materials of predominantly neutral tones with small limited bold finishes will compliment the existing street character while still bringing a new contemporary feeling. The combination of colours and materials has been used to break the large mass of the facade and create a unique response for the street frontage (Pages 17-23).

Image taken from: https://www.governmentarchitect.nsw.gov.au/policies/better-placed

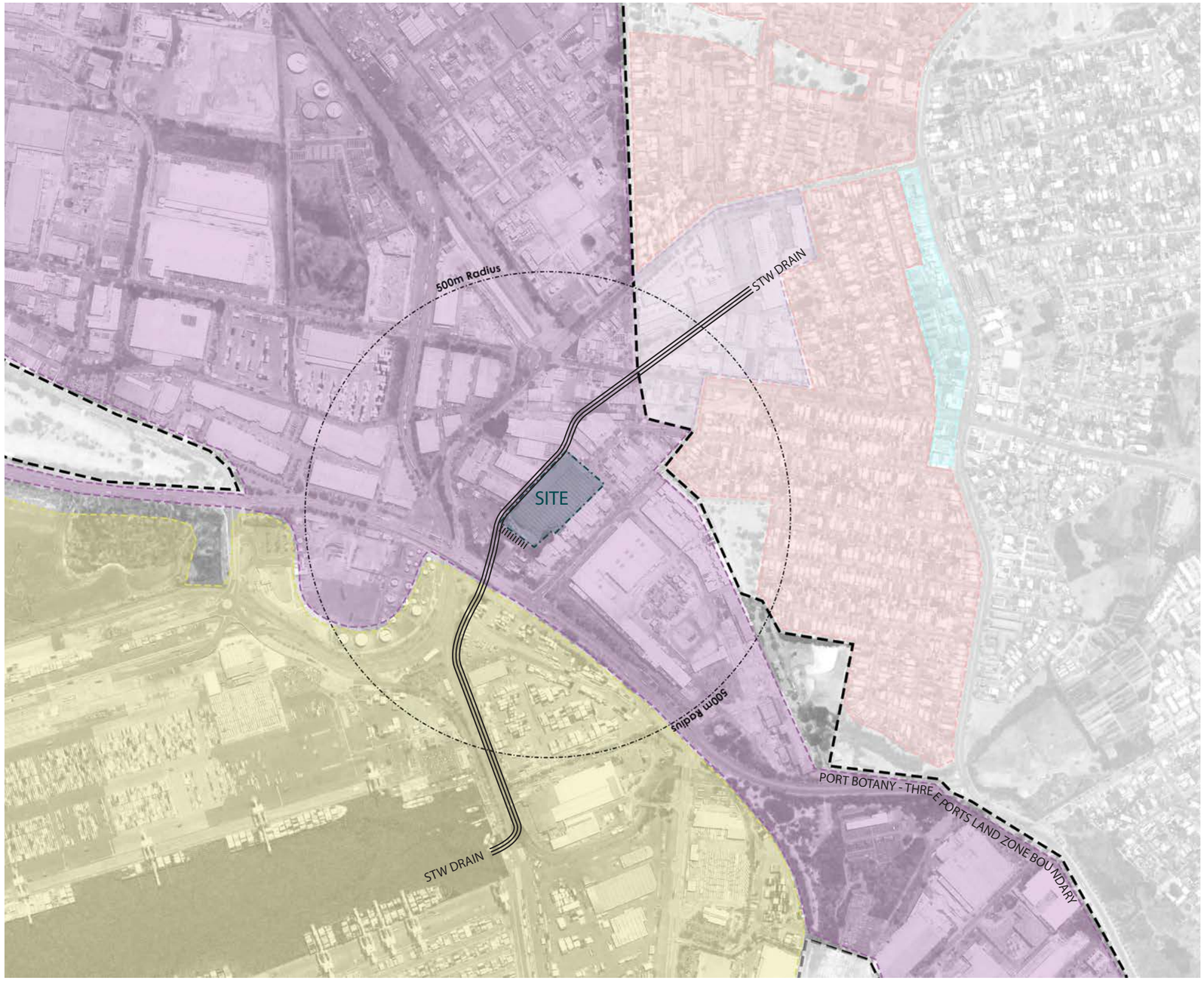
SITE ANALYSIS

URBAN CONTEXT

The site is located with the Randwick Council LGA. The Three Ports SEPP also applies as the principal environmental planning instrument. This zones the land and immediate surrounding sites as IN1 General Industrial.

To the East the major land use zone is designated as low-rise residential with a small portion being limited to light industrial and commercial (local centre).

The site is located in close proximity to Port Botany which makes the industrial use of the site appropriate for the surrounding character. In addition to this, the location of a basin to the South-West and stormwater drain to the North-West propose additional considerations on development.



LEGEND

- SITE BOUNDARY
- PORT BOTANY - THREE PORTS LAND ZONE BOUNDARY
- RADIUS CIRCLE
- IN1 GENERAL INDUSTRIAL
- R2 RESIDENTIAL ZONE
- SP1 SPECIAL ACTIVITIES
- B2 LOCAL CENTRE
- WATER BODY
- STORMWATER DRAIN

SITE ANALYSIS

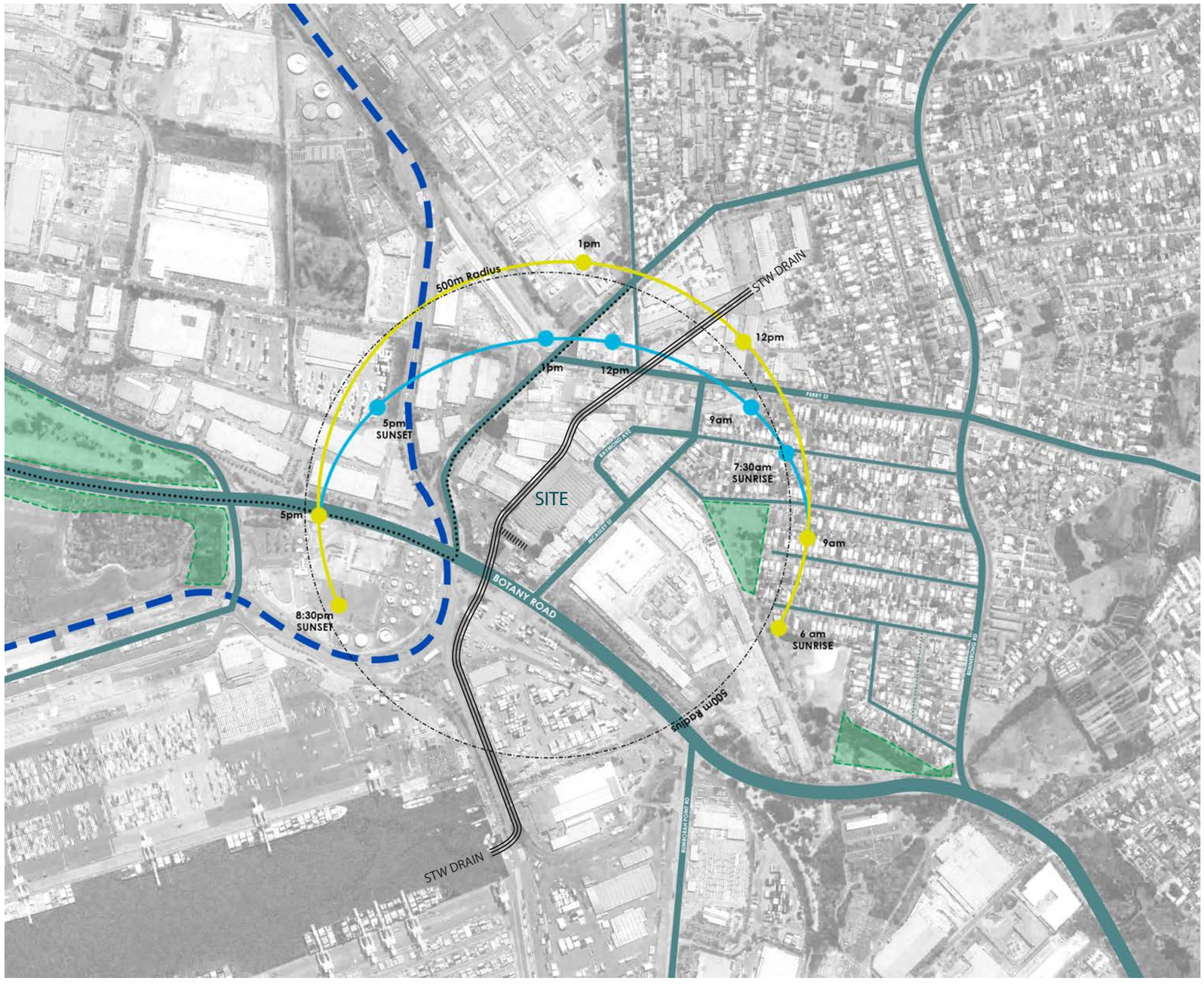
SITE SURROUNDING & THERMAL CONDITION

The frontage of the site faces North-East which means the primary office will be getting a large amount of direct sunlight. In addition to this the secondary offices located on the South-West facade will also get direct light. A shading system will need to be employed on both facades to minimise the direct sunlight entering the building.

The building fronts onto Raymond Avenue which is separated from Botany Road, and is still approximately 200m from the rail corridor. There are designated RE1 public recreation areas located to the East and West of the site. A focus has been placed on maximising green space within the landscaped areas and amenity of the site.

Bicycle parking will be included within site to allow for a connection to the existing bike track located on Botany Road.

CONNECTION TO SYDNEY AIRPORT AND M1



LEGEND

- SITE BOUNDARY
- ROAD NETWORK
- RE1 PUBLIC RECREATION
- SUMER SOLSTICE SUN PATH
- WINTER SOLSTICE SUN PATH
- RAIL CORRIDOR
- EXISTING BIKE TRAIL
- WATER BODY
- STORMWATER DRAIN

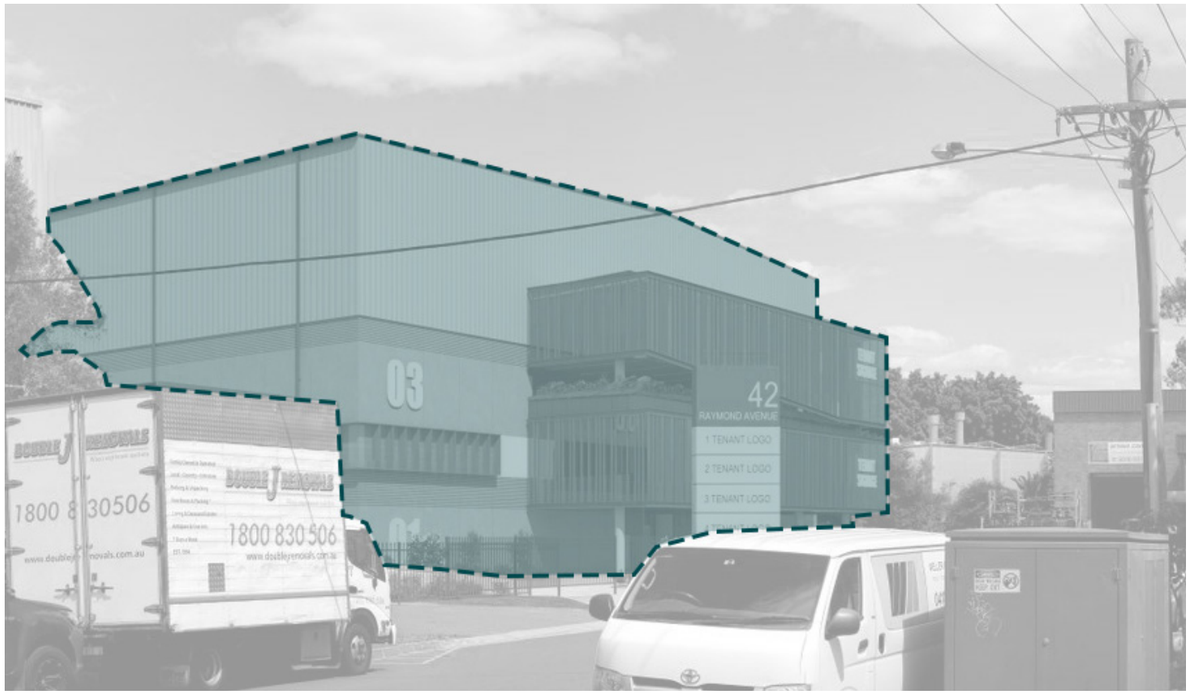
SITE ANALYSIS

STREET CHARACTER & FRONTAGE

VIA images created by MorphMedia.

The existing street character of Raymond Avenue consists primarily of two storey industrial developments. However, apart from this shared local industrial context, there is very little consistency between each of the developments, in both materiality and architectural design. In addition to this, with the exception of a few recently renovated properties, the general architectural quality of the street is dated. Due to the corner location and views of our site we believe this is an opportunity to further progress and enhance the architectural quality of the street. We aim to achieve this by creating an articulated facade treatment with a careful selection of materials and finishes that reflects the street character

The current state of the site frontage has very little landscape in comparison with the rest of the properties. Due to the large street frontage of the corner block it will be important to soften the mass with new landscaping as well as enhance the public domain and compliment the existing environment.



EXISTING SITE

TREE REMOVAL

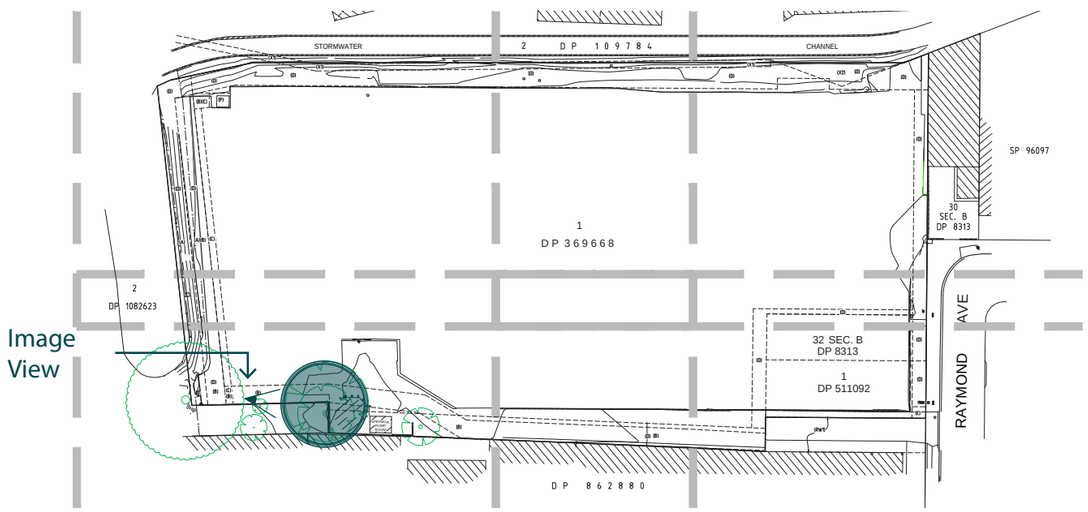
A mature Hills Weeping Fig Tree, located in the northern corner of Lot 2 DP1082623 on the boundary with Lot 1 DP369668, is recommended for removal to facilitate the proposed development. A primary design objective is to achieve the functional design required of a modern warehouse and distribution facility. The retention of the Fig tree was not considered viable to meet this primary design objective and achieve a proposed built form that future proofs the development to accommodate for the varying requirements of potential tenants, maximising the life-cycle of the development.

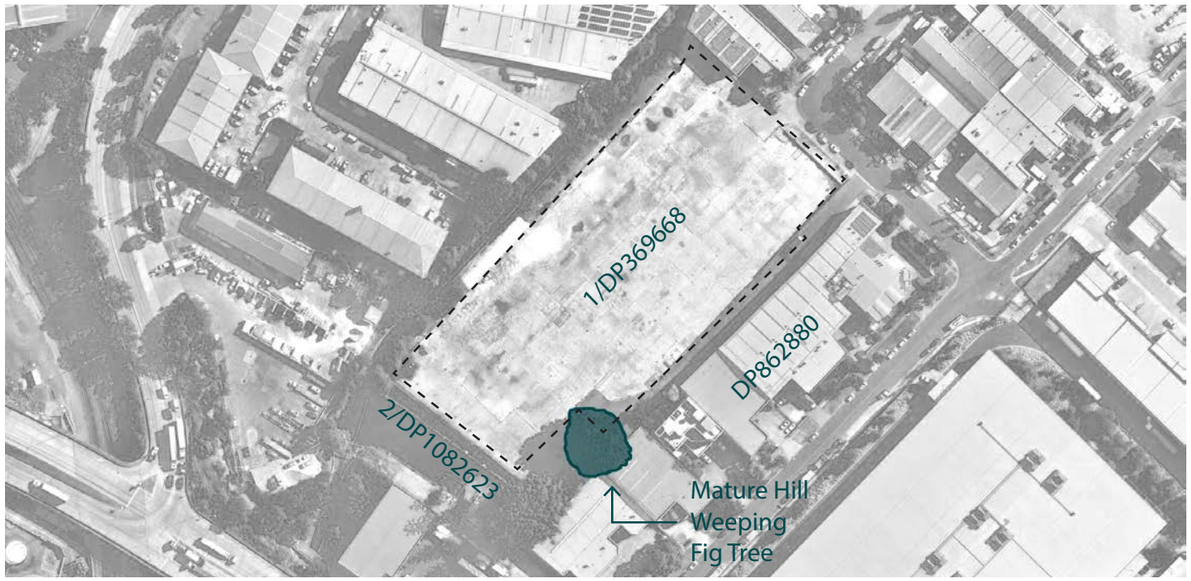
The tree's location on the site boundary could inhibit a clear path of travel for light vehicles accessing the car park at the rear. Maintaining this access is vital in creating separation between light and heavy vehicles where possible, as well as maintaining the one way vehicular circulation on the site.

If maintained, the overhanging branches and root systems would likely cause maintenance concerns for the facility in the future. Historically, lopping has been required to reduce encroachment on the fire services tank and neighboring properties.

The intention is to re-vegetate the site with indigenous and large canopy species, in areas of greater strategic value to the community. A focus on the Raymond Avenue frontage will provide a high-quality street presence and enhance the public domain. Plantings to the south-eastern and south-western boundaries will also improve the site amenity for employees and visitors. Given the highly urbanised and disturbed environment, this will substantially improve the current vegetation present as well as the biodiversity and habitats at the site.

This approach is in line with the objectives of the Three Port SEPP, being to encourage employment opportunities, facilitate and encourage port related industries that will contribute to the growth and diversification of trade through the port and encourage ecologically sustainable development.





Aerial view of the location of Hill Weeping Fig Tree

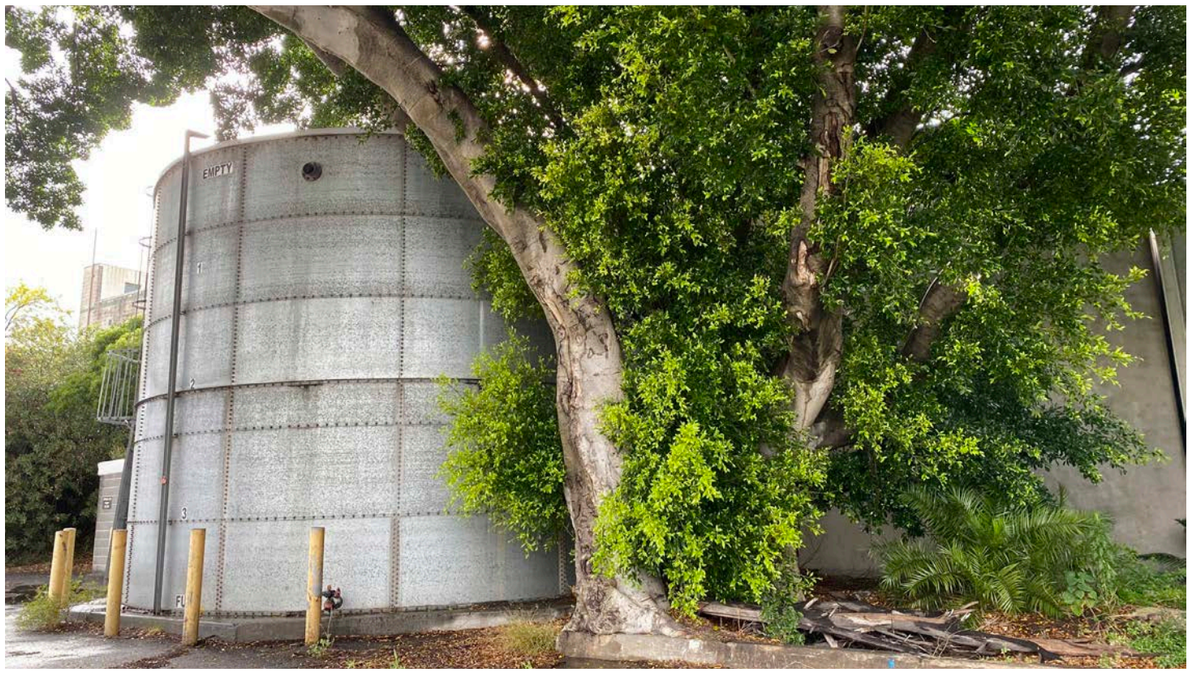
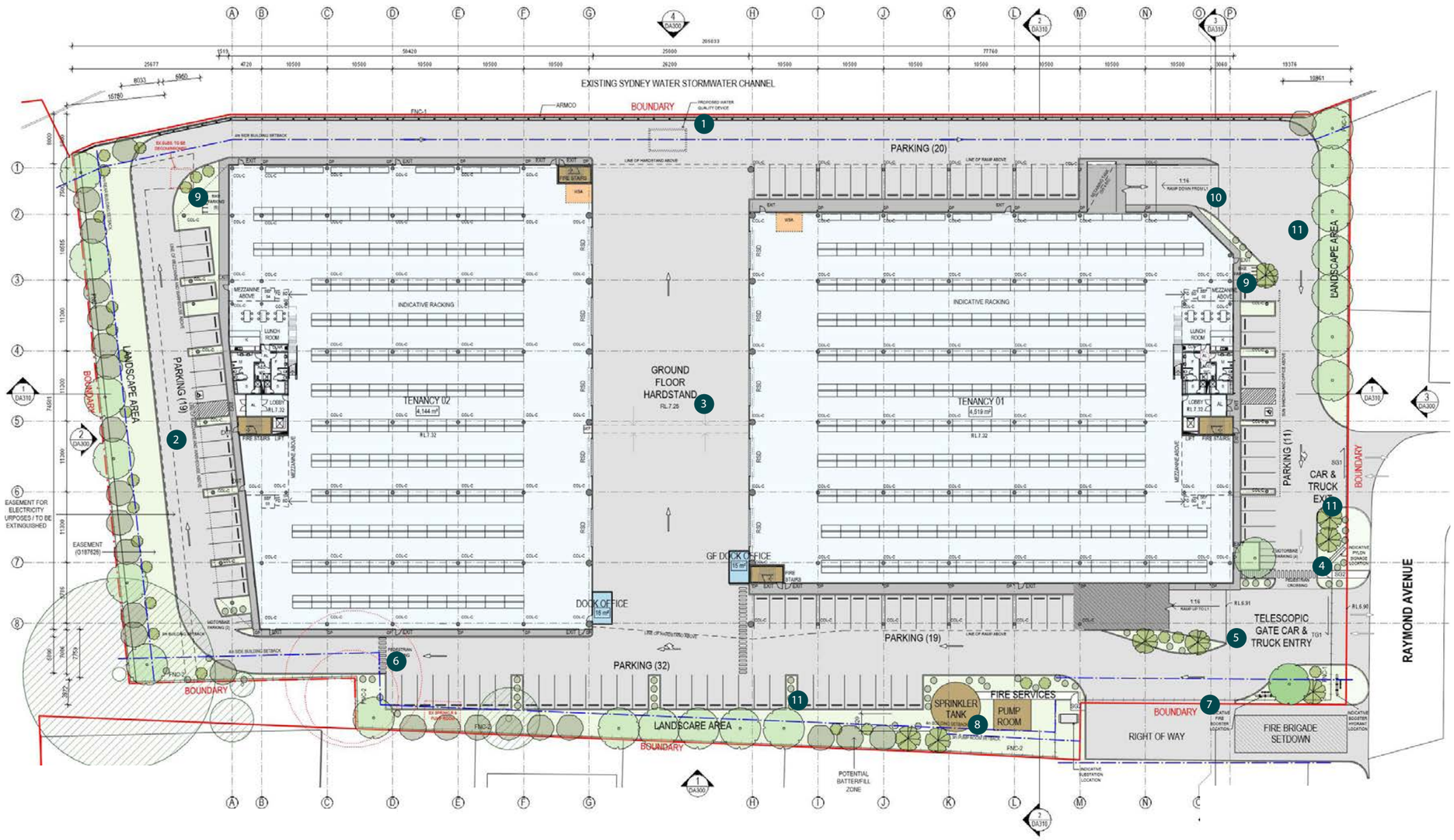


Image of Hill Weeping Fig Tree - View looking North East towards lot DP862880

DESIGN DEVELOPMENT

DESIGN RESPONSE

1. Appropriate creation of boundary setback from Northern storm water channel.
2. Appropriate interaction considered with neighbouring basin through battering and landscaping on South-West boundary.
3. Appropriate creation of a central breezeway hardstand for parallel loading.
4. Appropriate signage location to create recogniseable frontage of site, and reduce view of sub-station.
5. Appropriate creation of vehicle entry and exit, with one way circulation.
6. Appropriate consideration of pedestrian movement within site.
7. Appropriate solution to right of way and shared driveway with adjacent lot.
8. Appropriate location for fire services, hydrant, substation and brigade set down.
9. Appropriate number of vehicle and bicycle parking spread out throughout site.
10. Appropriate and compliant ramps to allow for safe heavy vehicle movement to level 1.
11. Appropriate building setback using landscape to create separation from street frontage and existing surrounding buildings



LEGEND

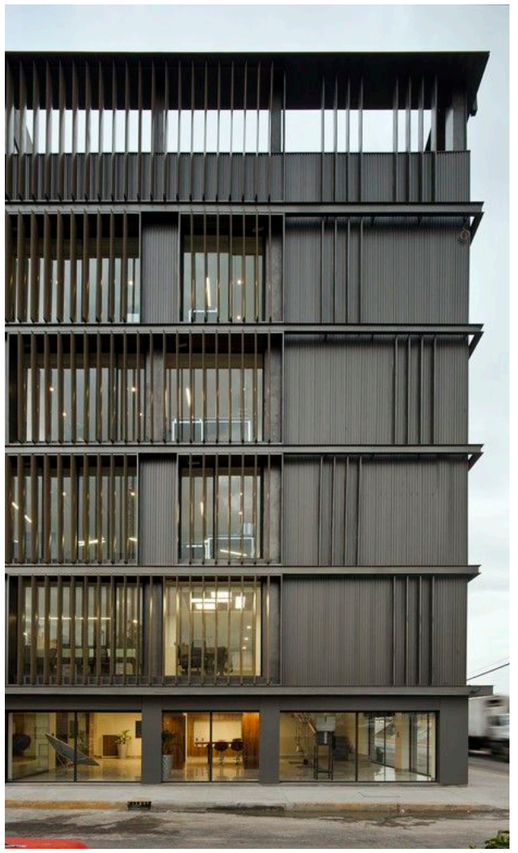
------	SITE BOUNDARY
RSD	ROLLER SHUTTER DOOR
FHR	FIRE HOSE REEL
FH	FIRE HYDRANT
COL-C	CONCRETE COLUMN
COL-S	STEEL COLUMN
DP	DOWN PIPE
GEF	GROUND EXHAUST FAN
SEF	SMOKE EXHAUST FAN
	DEMOLISHED
	FIRE SERVICES
	LANDSCAPE AREA
	WASTE AREA

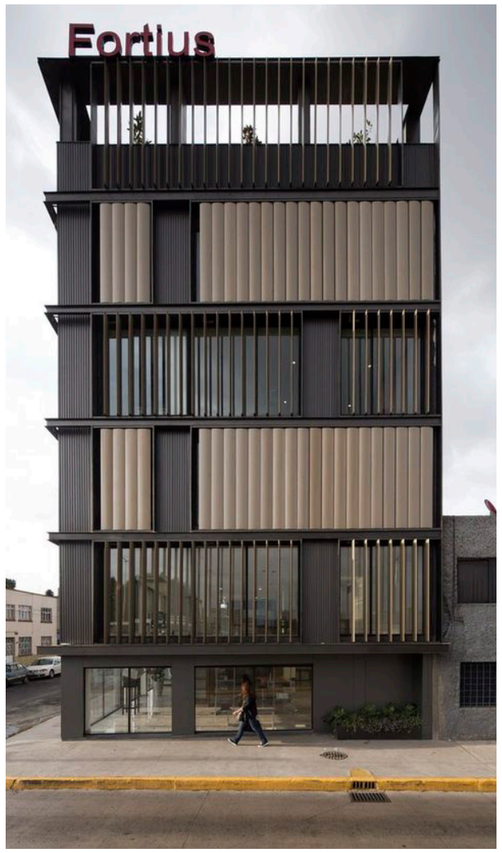
DESIGN DEVELOPMENT

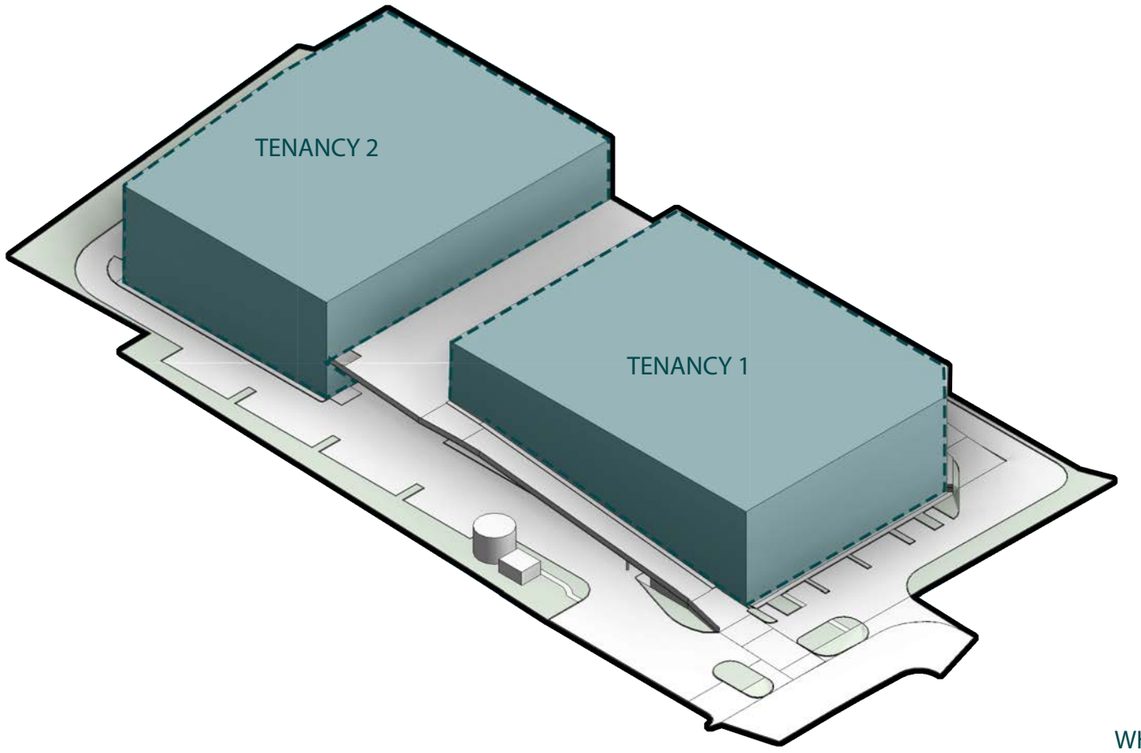
PRECEDENT STUDY

The key elements used from the precedents were the concept of a detached facade that reflected the interior levels and provided sun protection where necessary and revealed open space.

The idea of small portal windows and large overhangs to limit the allowance of direct light was also employed towards the design.





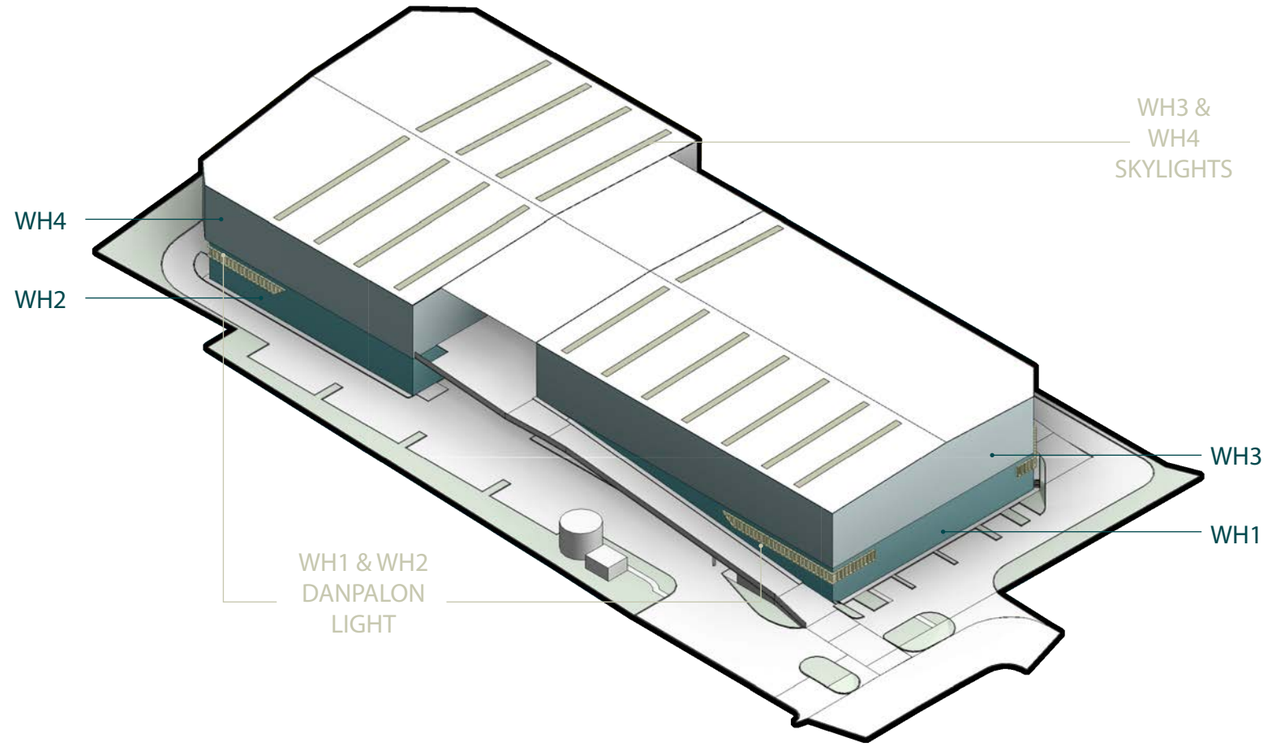


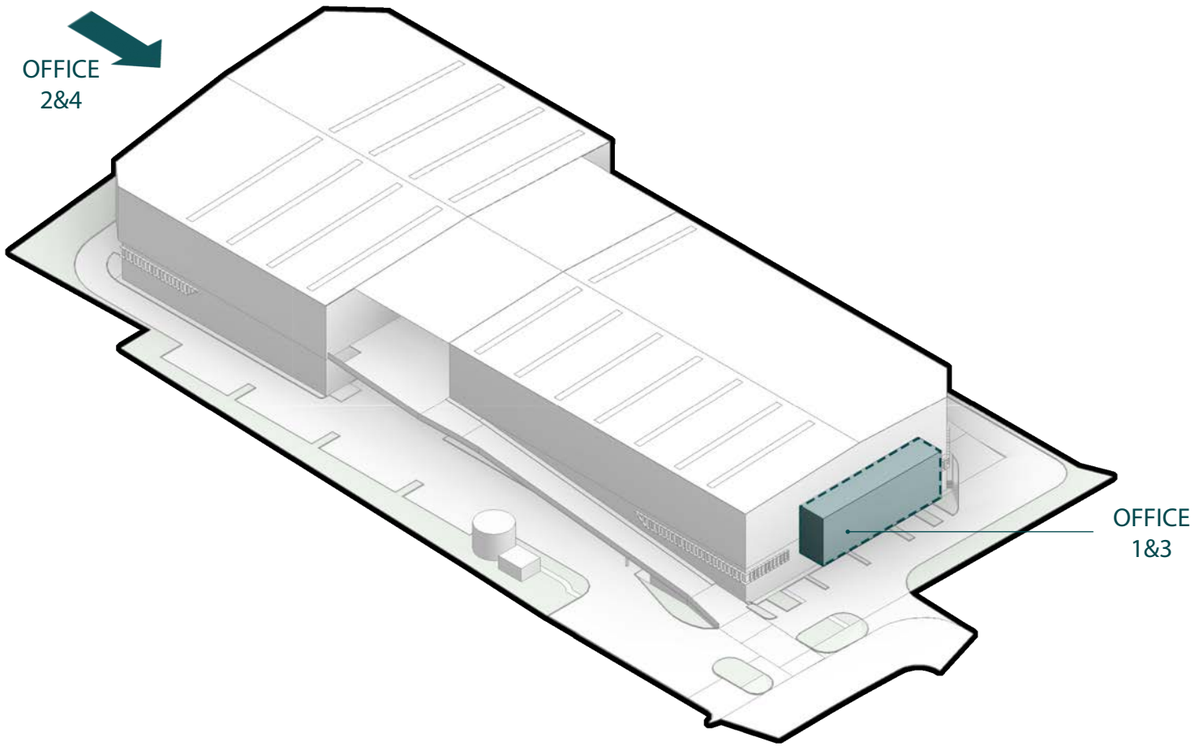
INITIAL MASSING

The unit masses are split to allow for a breezeway hardstand to run between them. This will allow for trucks to parallel load between the two tenancies and have a logical and simple entry/exit from the site.

WAREHOUSE TENANCIES

In order to maximise site efficiency, the development has been constructed over two floor levels and two mezzanines. There are 4 total warehouses tenancies with warehouse tenancies 1 & 2 located on ground and warehouse tenancies 3& 4 located on level 1. To allow for the breezeway to be replicated on level 1, one way compliant ramps are created for trucks to ascend and descend.



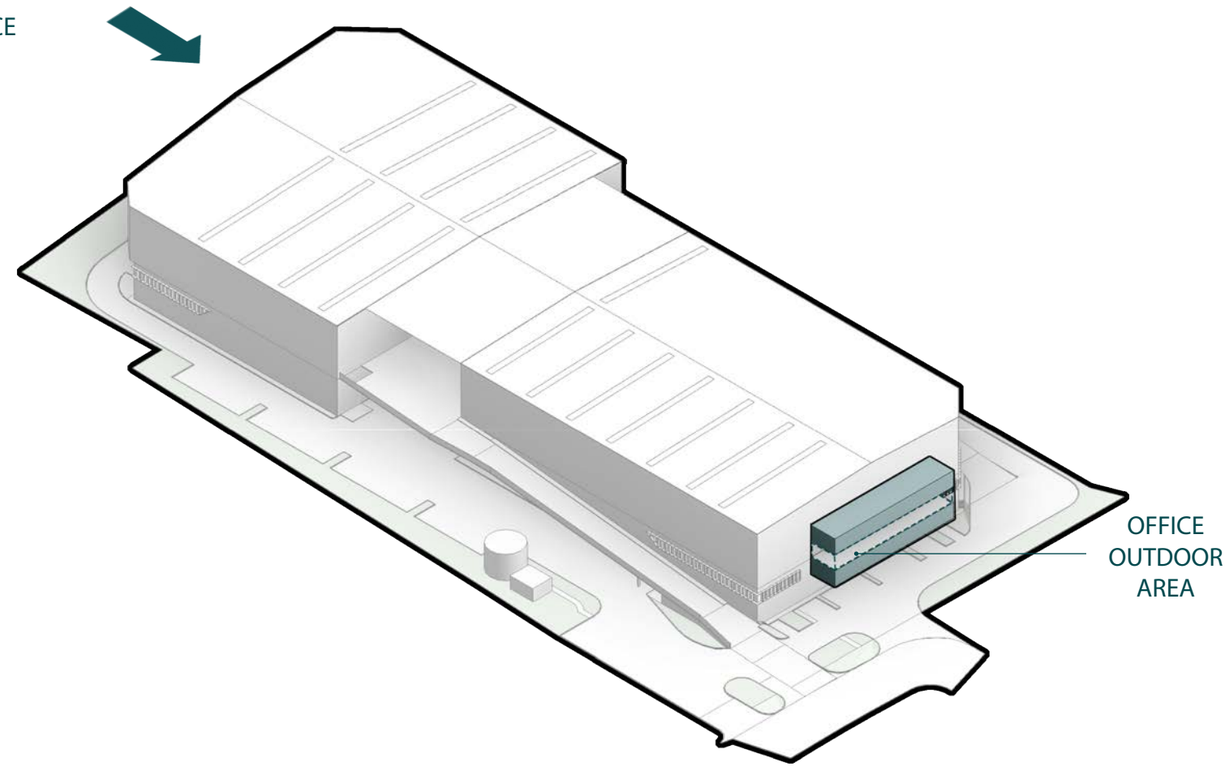


OFFICE LOCATION

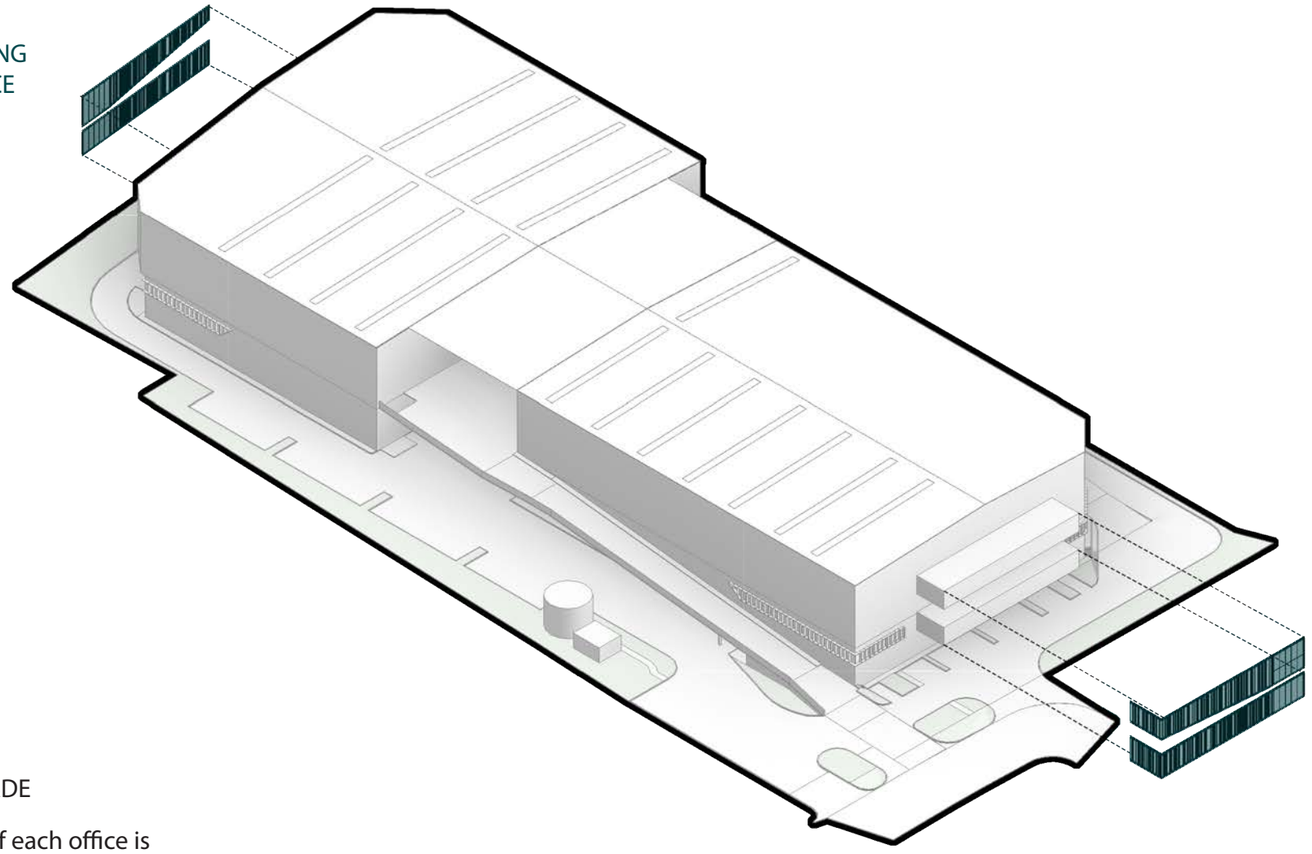
Each office is located at the end of the warehouse fronting the North-East and South-West facades of the site. They are located on the mezzanine levels of both the ground and first floor levels of the warehouses.

OUTDOOR AREA

Separating the two office mezzanines is an outdoor area located on the first floor level of the warehouse. This outdoor area is located on both the North-Western and South-Eastern areas of the development and is a shared space between the offices below and above it. This is an important aspect to the design as it creates interesting recreation space for the warehouse and office staff.

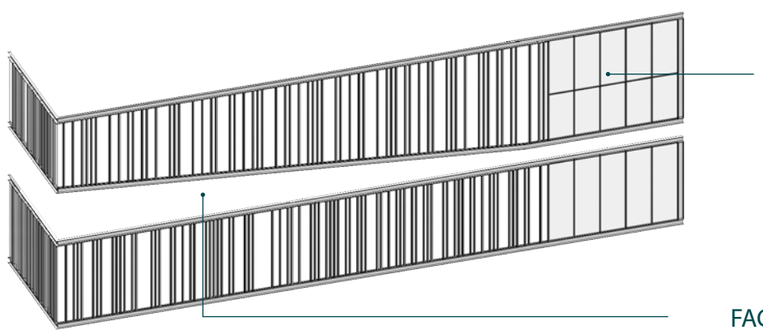


MASSING STRATEGY

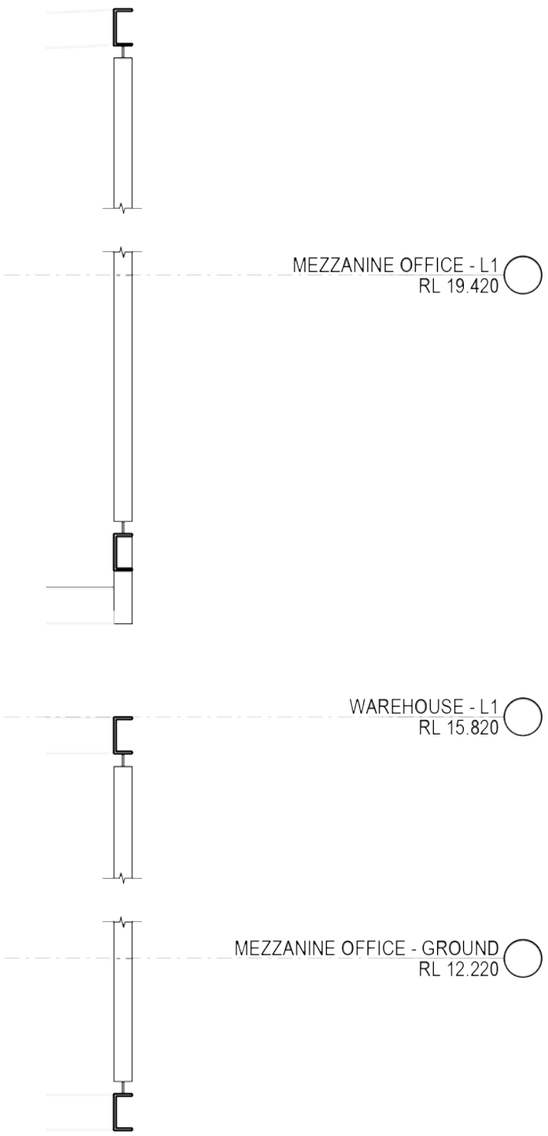


OFFICE FACADE

The facade of each office is defined by a series of battens and steel structure shading devices to protect from the East and West sun. Each of the shading devices peels up to reveal the outdoor office spaces to allow for more light and a better outdoor experience.

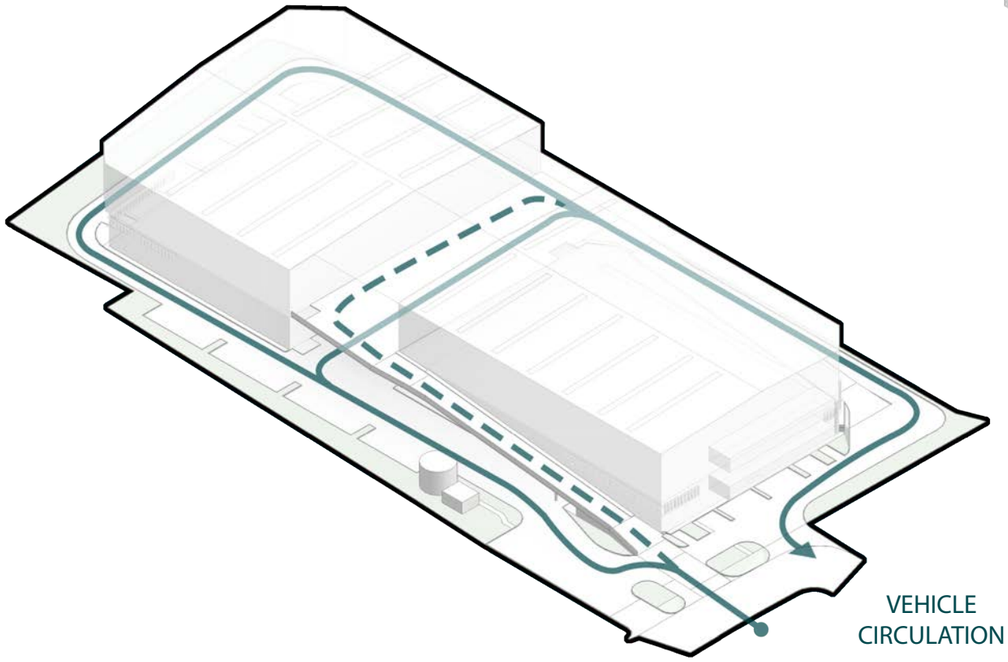


FACADE DETAIL

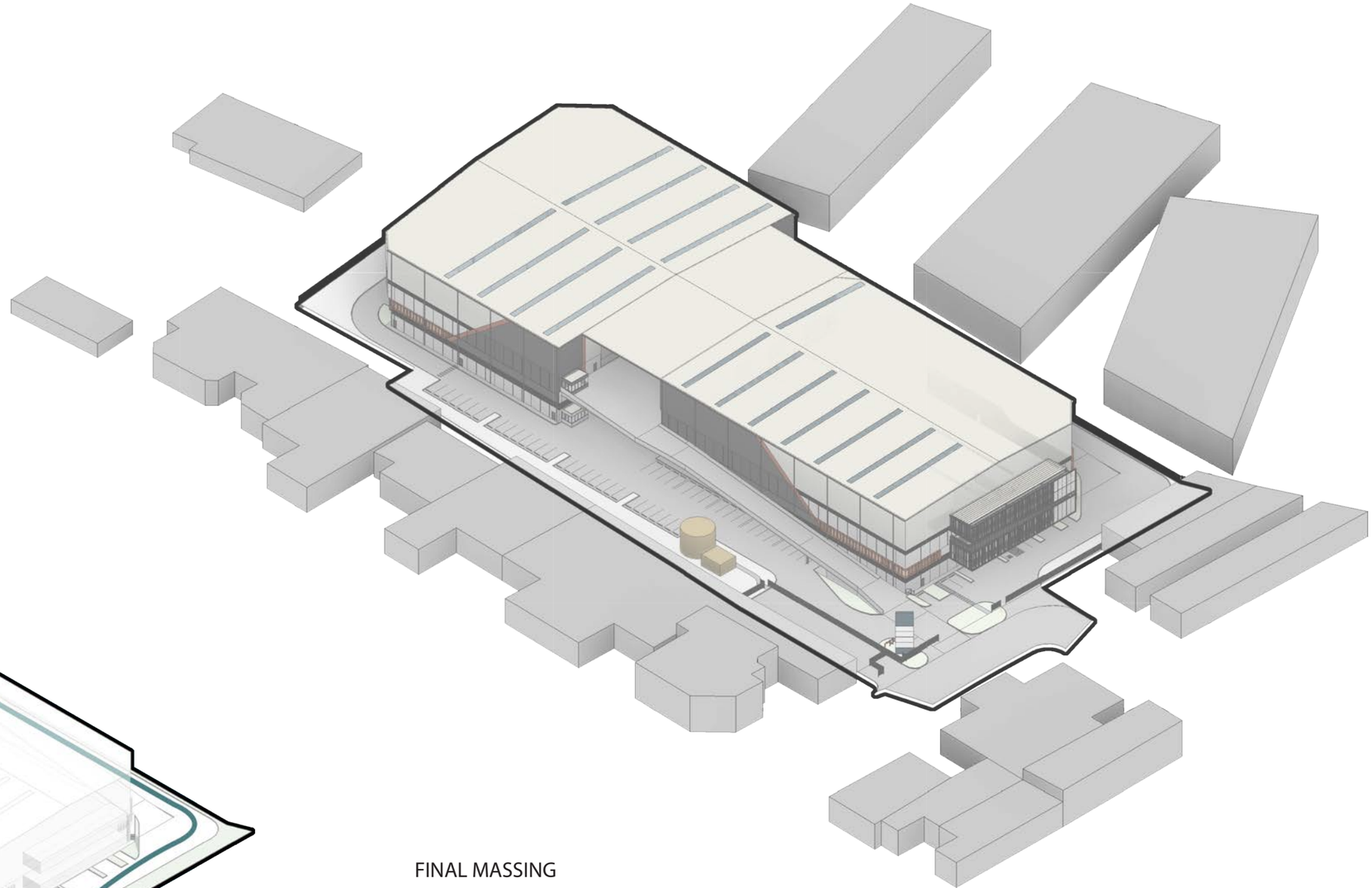


CIRCULATION & ACCESS

The circulation throughout the site is all one way moving in a clockwise direction. Entry is located on Raymond Avenue and allows access to the ground and level 1 hardstand. All routes then lead to the exit located adjacent to the entry.



VEHICLE CIRCULATION



FINAL MASSING

The final massing exhibits the bronze strip of windows which ties in with the diagonal pattern along the warehouse. It also displays the bronze sun shading device against the office with the opening allowing for more light to enter the balcony area. The translucent sheeting located on the roof also shares the space with an allocated area for solar PV panels.

URBAN DESIGN AND VISUAL IMPACT

The proposed development is nestled between several other industrial buildings, has a narrow frontage to Raymond Avenue and a significant setback from Botany Road minimising the visual impact on the surrounding area.

The proposed height is a direct response to the market demand for high clearance storage suitable for warehousing and distribution uses, with two levels maximising the industrial space and employment opportunities available in a constrained industrial precinct.

When viewed at pedestrian level from McCauley Street, the line of sight to the uppermost ridge level is screened by the fascia and eaves line of the existing buildings running north south along McCauley Street(Refer Fig.1 below & Section 2 - Drawing DA601). When viewed from Botany Road, the proposed building height of 22.2m is consistent within the existing streetscape which includes the 280m long x 26m high Paper Mill building (Refer Fig.2 below & Drawing DA601).

Given the surrounding area includes the Caltex Oil Terminal, heavy industry and container storage facilities, the clean lines on this modern development will be a welcome addition to the streetscape.

Architecturally the development provides a fresh identity and modern aesthetic that speaks to the future character of the site and context. The proposed building is a clean and simple form with modern offices intentionally located on the north-eastern and south-western facades. The north-east office provides a street presence to the development on Raymond Avenue, whilst the south-west office is located to benefit from the view across the container terminal to Botany Bay. Outdoor staff amenity is located mid-level between the office floors to provide a shared space for all office and warehouse users.

Horizontal banding at mid height reduces the scale of the development and provides a direct relationship with the adjoining buildings flanking the east and west facades. Translucent wall cladding further articulates the façade whilst providing natural lighting to the lower levels. The lighter colour palette on the upper level has been deliberately muted so as to blend the façade in with the natural skyline beyond.

Fig 1. Elevation North

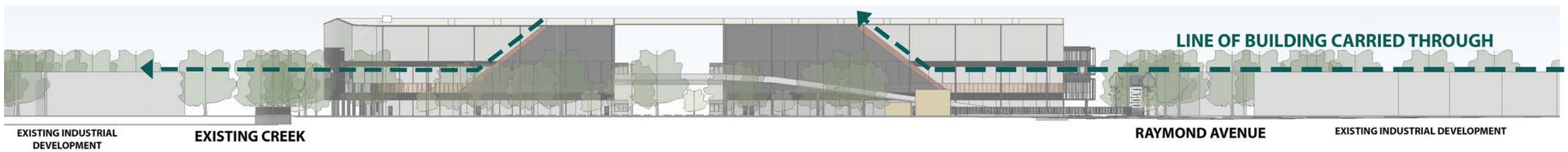


Fig 2. Elevation East

Aerial view of building within surrounding context: North West Corner

Aerial view of building within surrounding context: North East Corner

DESIGN DEVELOPMENT

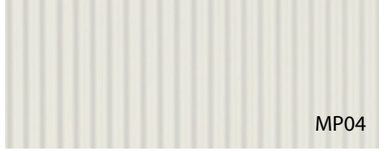
PRELIMINARY MATERIAL PROPOSAL

LEGEND

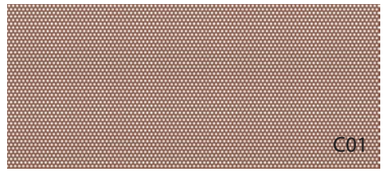
P01	PAINT FINISH COLORBOND ARIES OR SIMILAR 'BRONZE' COLOUR
P02	PAINT FINISH COLORBOND MONUMENT
P03	PAINT FINISH COLORBOND SHALE GREY
MP01	PROFILE METAL WALL CLADDING TRIMDECK COLORBOND ARIES PAINT FINISH
MP02	PROFILE METAL WALL CLADDING TRIMDECK SHALE GREY COLORBOND PAINT FINISH
MP03	PROFILE METAL WALL CLADDING TRIMDECK MONUMENT COLORBOND PAINT FINISH
MP04	PROFILE METAL ROOF CLADDING TRIMDECK SURFMIST COLORBOND PAINT FINISH
MP05	PROFILE METAL ROOF CLADDING TRIMDECK TRANSLUCENT SHEET
C01	'LOCKER GROUP ODYSSEY' PERFORATED MESH PANEL POWDER COAT FINISH TO MATCH COLORBOND ARIES - OR SIMILAR
C02	DANPAL MICROCELL POLYCARBONATE SHEET 'SOFTLITE AMBER' FINISH - OR SIMILAR
C03	MONDOCLAD ALUMINIUM CLADDING SOLID COLOUR 'BLACK' - OR SIMILAR
W01	PRECAST CONCRETE PANEL NATURAL OFF-FORM FINISH - OR SIMILAR
W02	PRECAST CONCRETE PANEL SAND-BLASTED TEXTURED FINISH - OR SIMILAR
W03	GLAZING - DARK GREY TINT - OR SIMILAR

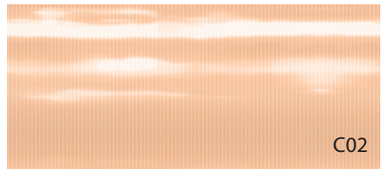
PAINT COLOURS

METAL CLADDING

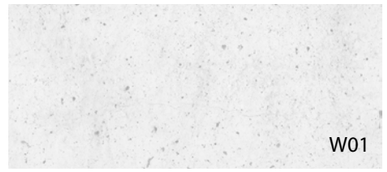


CLADDING





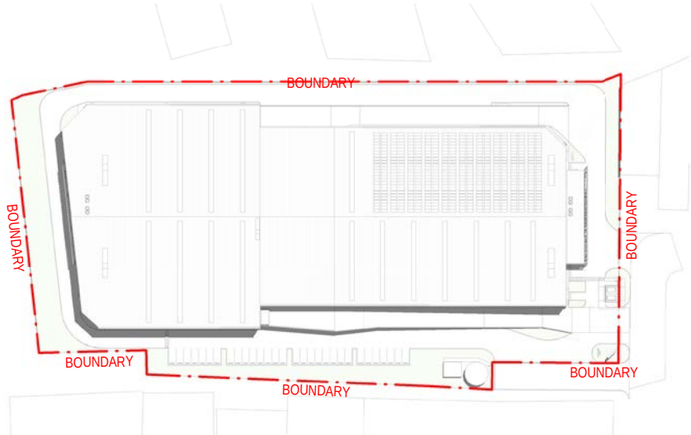
WALL ELEMENTS



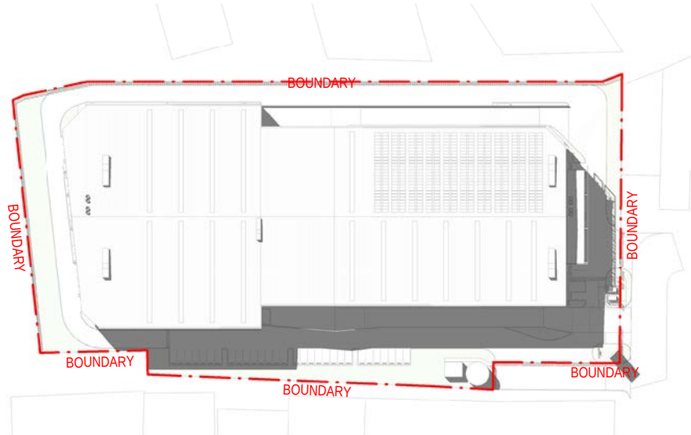
DESIGN PROPOSAL

SHADOW DIAGRAMS

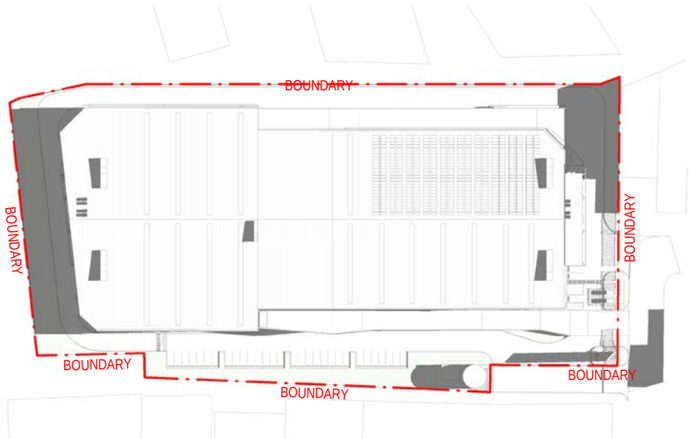
9AM SUMMER SOLSTICE (21-12) SHADOWS



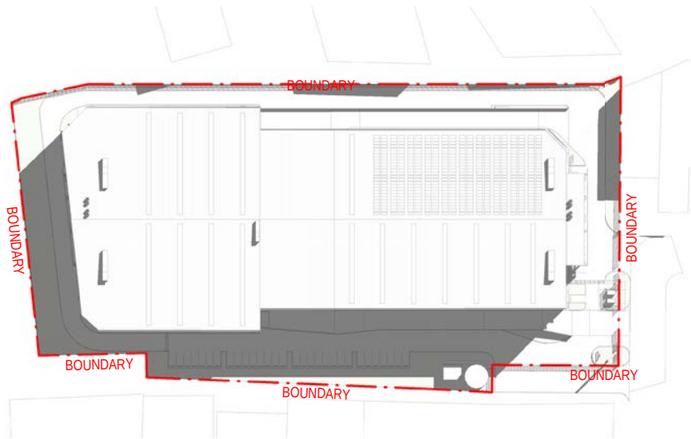
12PM SUMMER SOLSTICE (21-12) SHADOWS



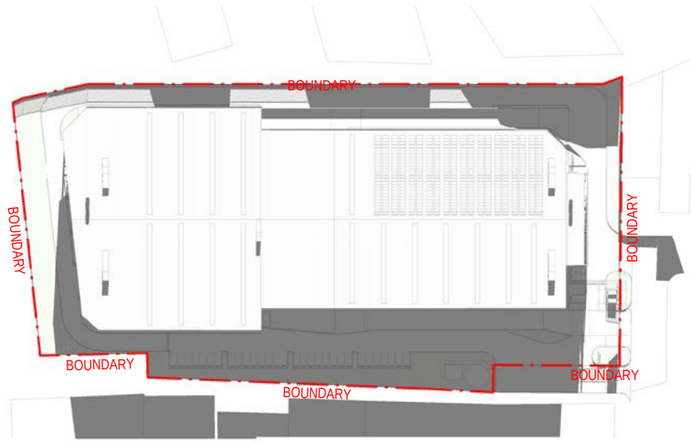
3PM SUMMER SOLSTICE (21-12) SHADOWS



9AM WINTER SOLSTICE (21-06) SHADOWS



12PM WINTER SOLSTICE (21-06) SHADOWS

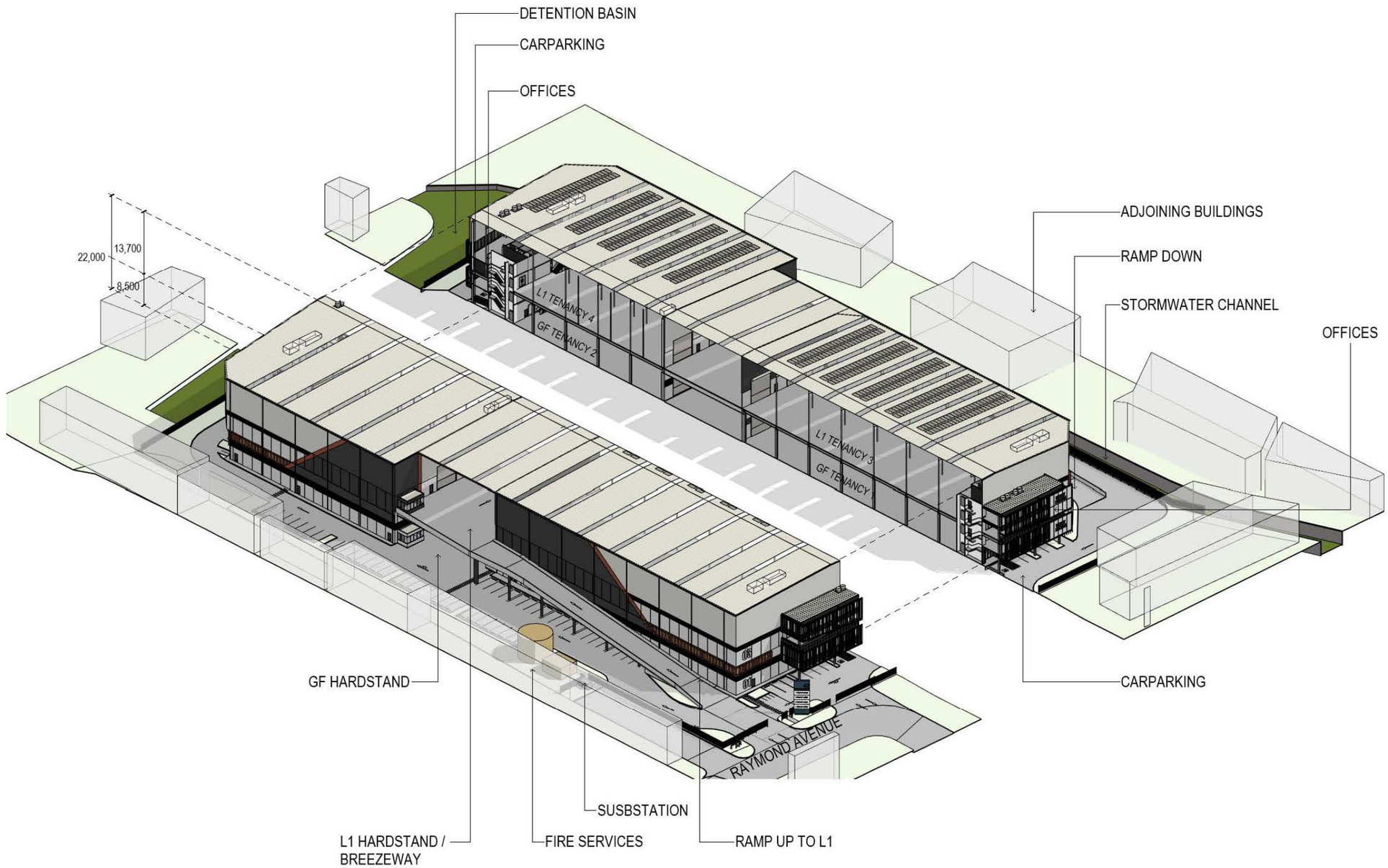


3PM WINTERSOLSTICE (21-06) SHADOWS

DESIGN PROPOSAL

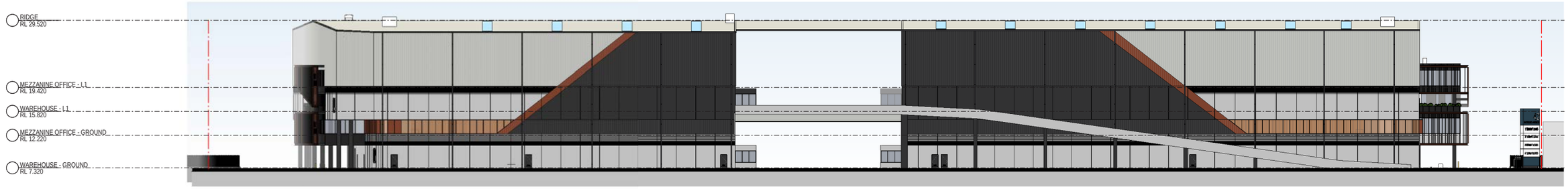
PERSPECTIVE SECTIONS

This perspective section shows a visualisation of how the double stacked warehouse works and the operation of the ramps that create the level 1 breezeway. It also exhibits the design of the office with the separating outdoor space between them.



DESIGN PROPOSAL

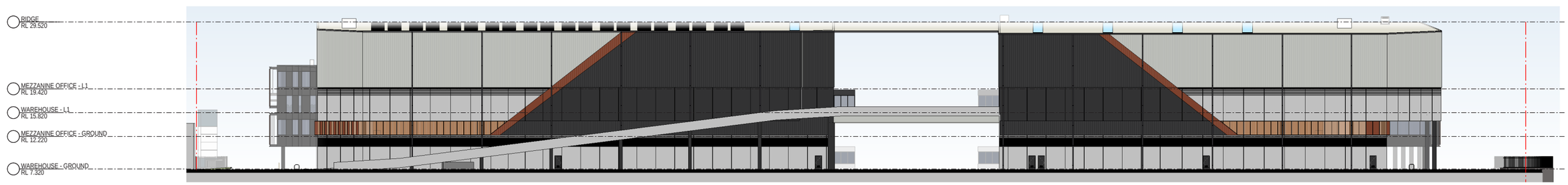
ELEVATION VIEWS



South Elevation

West Elevation

East Elevation



North Elevation

DESIGN PROPOSAL

3D PERSPECTIVE - EAST OFFICE DAY

Hale

DESIGN PROPOSAL

3D PERSPECTIVE - WEST OFFICE DAY

Hale

DESIGN PROPOSAL

3D PERSPECTIVE - EAST OFFICE EVENING

Hale

DESIGN PROPOSAL

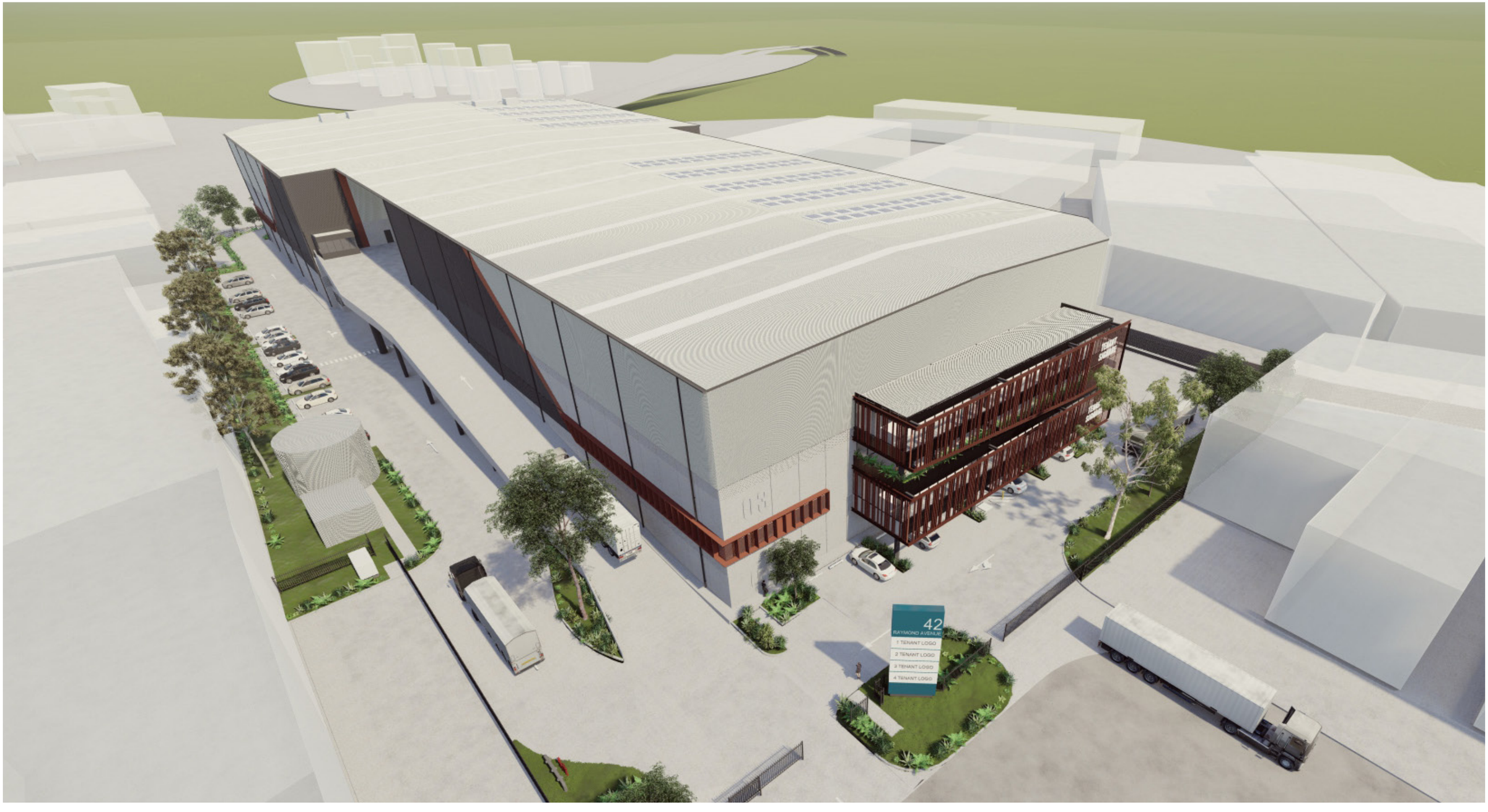
3D PERSPECTIVE - EAST OFFICE STREET DAY

Hale

DESIGN PROPOSAL

3D PERSPECTIVE - EAST SITE AERIAL

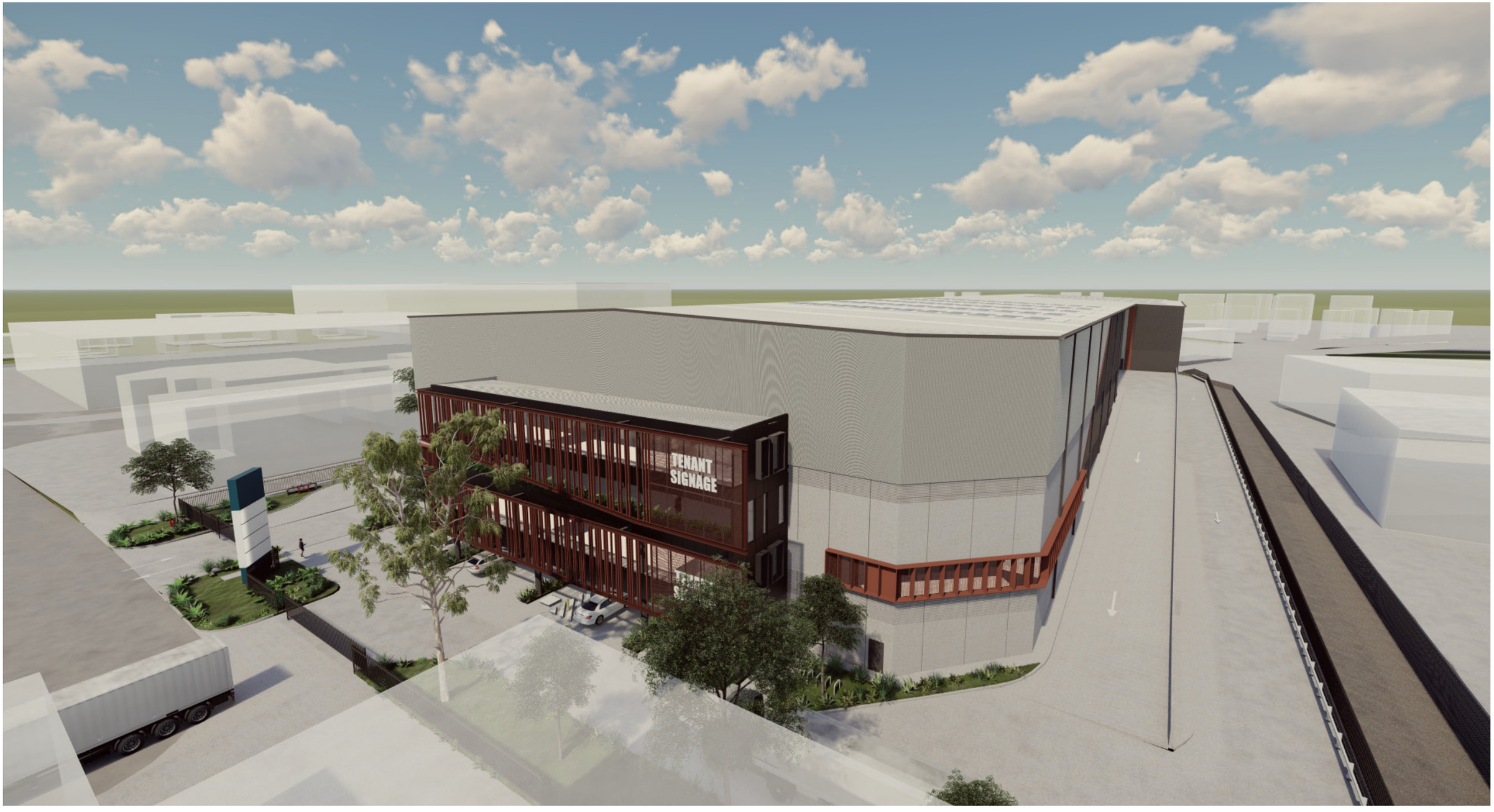
Hale



DESIGN PROPOSAL

3D PERSPECTIVE - NORTH SITE AERIAL

Hale



SUMMARY

Returning to the original criteria addressed by SEAR's a summary has been created to concisely review the key architectural and design components that produce and acceptable and appropriate proposal for the given site.

- Site is surrounded by similar industrial buildings within an industrial sector of Randwick council, making the function of the proposed building appropriate.
- The maximised landscaped space, amenity and recreational space within the site, created from setbacks and outdoors areas creates a high quality work environment.
- Consideration of thermal comfort through facade treatment including louvers in response to direct sunlight and site thermal conditions.
- A dynamic street frontage address creates a sense of interest for the existing street character.
- A clear understanding of setbacks, limitations, surrounding elements and street address to create an acceptable site plan.
- Appropriate display of the massing process development to achieve and appropriate design to take forward into design.
- Understanding of the massing impact on the immediate spaces within the site and the surroundings.
- A careful selection of colours, finishes and materials to create an attractive design for the street consistent with the surrounding context..
- An articulation of facade and design patterns to create interest as well as along light into the interior spaces.
- Realistic presentation of design proposal to understand visual and street impact of architectural quality.