

Adaptability: A high quality urban design standard will be adopted which is both adaptable and flexible in each key component, including the Intermodal Terminal, Warehouse and Distribution Facilities and the Freight Village to ensure longevity, maintained value and ability to suit the needs of future generations, for its stakeholders, occupants and the community.

Sustainability: Ecologically sustainable development principles will be incorporated into all facets of the proposal where practical and possible. Water sensitive urban design will be integrated into the built and landscaped elements of the development, and on-site collection and re-use of stormwater and recycled water will be considered.

Movement: The urban design will support an internal vehicular and pedestrian traffic network that will be both safe and efficient, and may incorporate an integrated public or on-site transport system as well as pedestrian and cycle connections throughout the development and to surrounding areas.

04.2 landscape

This landscape section of the Urban Design Principles has been provided by Hassell and should be read in conjunction with the detailed Landscape Design Report at Appendix A.

vision

The development seeks to recognise the natural attributes of the locality and looks to integrate and imitate these qualities into a strong design theme that is reinforced in every aspect of the developments open space areas, by way of:

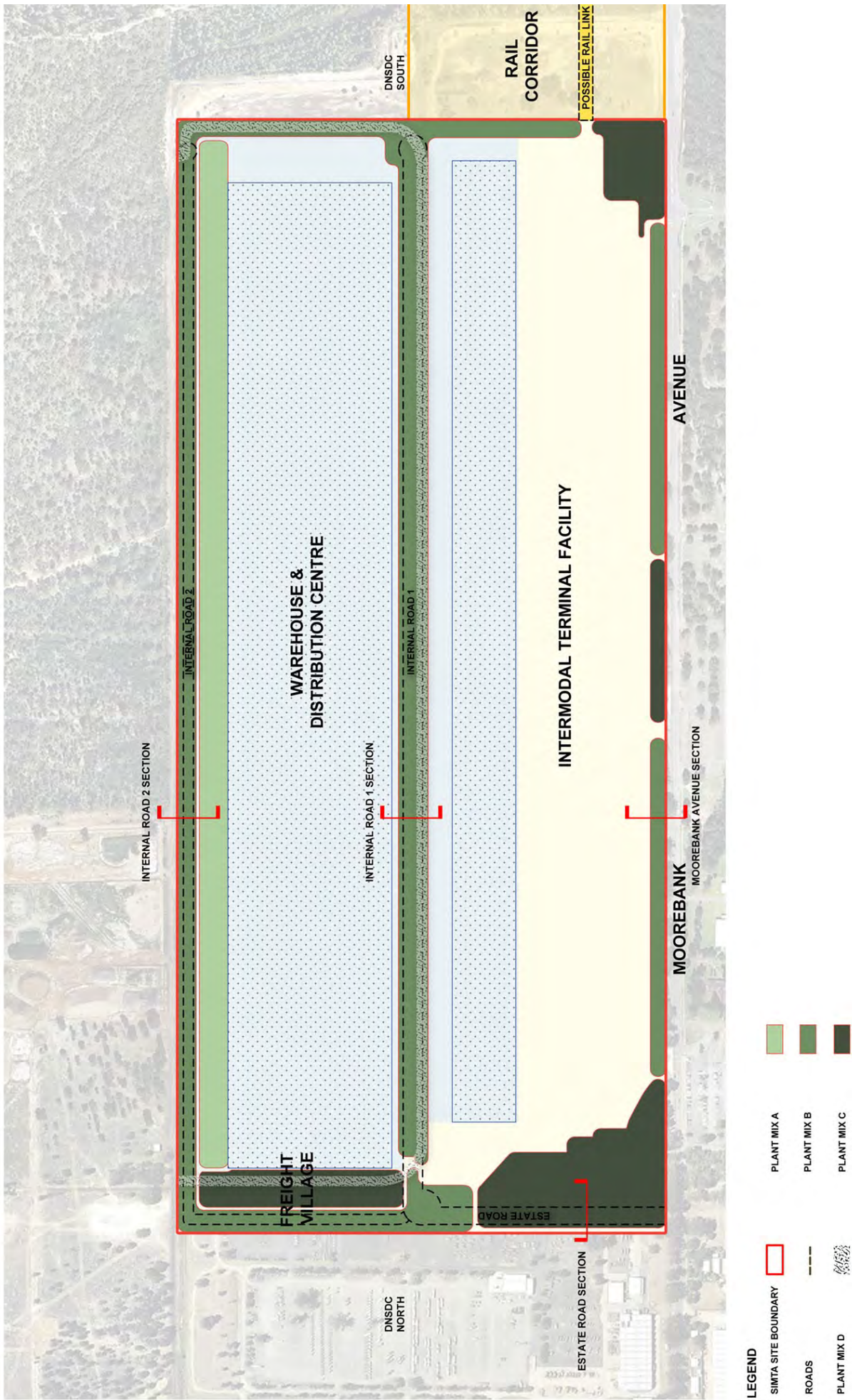
- strong use of endemic species;
- consistent site wide tree canopy;
- native understorey plantings;
- low maintenance approach to the public domain;
- local material context to landscape surface treatment and finishes, and an; and
- underlying natural landscape character throughout the development.

Reinforcement and extension of the surrounding natural context and ecological qualities will ensure the creation of a high quality landscape that will add environmental and aesthetic value and provide an inherent identity to the development.

The development endeavours to visually and physically connect with the existing landscape and natural vegetation adjacent to the site, through complimentary use of key tree species and understorey screen plantings.

The development will draw upon the sites local assets and will:

- aim to create a distinctive and attractive natural environment;
- introduce a strong native planting theme appropriate to the local setting and existing vegetation;
- provide road verges for street tree plantings;
- provide an informal streetscape character by randomly planted groups of selected native tree species;
- consist of high quality robust landscape materials that complement the setting;
- utilise selected native plant material to accentuate and articulate selected spaces, entries and focal points;
- provide a strong and consistent texture and colour of materials and planting;
- preserve the natural and 'random' character of the existing landscape setting;
- encourage opportunity for engagement by the site users with the natural environment; and
- provide an aesthetically pleasing and safe environment for workers and visitors alike.



structure

Each component of the landscape design has been carefully considered to help achieve the overall vision for the development. The landscape planting will subtly vary to respond to each spatial zone across the site, while maintaining an overall consistent theme complementing the endemic natural bushland adjacent to the site (see Figure 11 and Appendix A).

Planting will strengthen and distinguish spaces and provide links between the proposed key vegetation zones, being:

- Entry points and community amenity space;
- Boundary treatment and buffer zones;
- Vehicular carpark; and
- Bioretention channels.

Furthermore, the landscape design proposes to build on key principles identified within the Liverpool DCP Part 1.1 and Part 2.4, by:

- Retaining and enhancing the variety of natural characteristics where possible;
- Protection and enhancement of the environmental integrity of the area;
- Ensuring high standard of landscaped areas;
- Ensuring clear sight lines and passive surveillance is maximised;
- Ensuring that the development encourages people to use and interact in streets, car park areas and open spaces without fear or risk;
- Protection of existing natural regeneration on adjoining sites;
- Planting species that are consistent with the landscape themes proposed herein;
- Planting species that are consistent with Liverpool DCP Part 1.2, Appendix 2, for preferred plant species;
- Plant selection that is consistent with the woodland community present on the site; and
- Ensuring appropriate application of site wide Water Sensitive Urban Design Principles.

materiality

All proposed landscape materials used to pathways, boardwalks, channels, planting zones and pedestrian amenity spaces will be selected to enhance the endemic plant community and create a strong language that will permeate the entire development. Materials will compliment the built form and will provide a robust, rustic feel in the form of warm tones and natural textures.

Materials traditionally associated with a bushland landscape such as that proposed for this development may include aged metals, gravels, natural stone and timber. They will age gracefully and require a minimum of maintenance. These materials will be used to create a variety of elements including seats and shade structures, signage componentry, paving and edging.

04.3 streetscape

The Urban Design Principles include streetscape design initiatives which aim to ensure appropriate scale, placement and character of elements throughout primary interface zones. The streetscape architecture will be developed with a focus on areas of the SIMTA site that will be required to have a positive impact on the presentation of the overall development. These areas will primarily include the Moorebank Avenue frontage, the main estate road, a number of bio-retention swales, and boundary and buffer zones. Building and built form architecture at key frontages should display high quality architectural treatments which are discussed separately in this report.

Moorebank Avenue Frontage: Scale and visual screening will be key design considerations which will be addressed primarily through the landscape concept for the Moorebank Avenue frontage.

Utilising a 'buffer zone' between the SIMTA site boundary and the proposed intermodal terminal zone along Moorebank Avenue, strong shielding vegetation will be provided to either side of a bio-retention swale and will include a combination of dense tree canopy cover as well as lower screen planting.

Key nodal points along Moorebank Avenue, specifically at vehicle entry zones will include feature planting to highlight the arrival experience and embellish the native planting character established elsewhere along the road frontage.

Central Access Road (Estate Road): Consistent with the planting proposed to the Moorebank Avenue frontage and the boundary and buffer zones, the proposed landscape design to the central access road will consist predominantly of endemic canopy trees of Eucalyptus species and uniform dense screen planting of native shrubs and ground covers at lower levels.

Screening of buildings, shade provisions to pedestrian areas and visual diversity and interest will be paramount in species selection, placement and density.

Bio-retention Swales: Whilst achieving the primary function for any requirement for water filtration and bio-retention, the plantings proposed to the swales are to remain consistent with the overarching site wide objectives of uniform species use, endemic planting character, native landscape language and a variety of experiences and visual connections for the users of the development.

Boundary Treatment and Buffer Zones: The landscape planting proposed to the development boundaries and buffer zones shall be consistent with the endemic surrounding bushland species, evident locally, and in doing so provide a strong and unifying tree canopy structure that links the site holistically and provides the essential scale of planting necessary to compliment the developments built form.

04.4 road network and hierarchy

The SIMTA proposal indicates a road network that will support the various land uses on the site, including an Intermodal Terminal, Warehouse and Distribution Facilities, and supporting administration, amenity and other general uses in a zone known as the 'Freight Village'.

The proposed road network comprises an Estate Road, Internal Road 1 and Internal Road 2. Each road serves as a general guide to the urban structure of the site (see Figure 1).

The detail design and placement of these roads will need to take into consideration the drainage regime of the site and the configuration and staging of development to allow adequate flexibility.

The proposed road hierarchy comprises the following:

Moorebank Avenue Frontage: The major connection to the SIMTA site for vehicular access as well as pedestrian and cyclist entry and exit (see Figure 12).

Estate Road: The major access road into the SIMTA site with a 20m road reserve, including a dual carriageway of two dedicated 7m wide traffic lanes on each side of a landscaped median, integrated pedestrian and bicycle path and landscape buffer (see Figure 13).

Internal Road 1: A service road for heavy vehicles to access warehouse and distribution facilities with a 18m road reserve and a 8m bio-retention corridor. The road reserve includes 13m of roadway as well as an integrated pedestrian and bicycle path (see Figure 14).

Internal Road 2: A dedicated internal road to the 'Freight Village' component of the proposed development and beyond to dedicated staff parking areas for potential large format distribution warehousing along the north and eastern boundaries of the site. Internal Road 2 is proposed to include an 8.5m road reserve along the eastern site boundary (see Figure 15).

A pedestrian and cycling network will be included in the detailed planning of the site and a provision for shared pedestrian and cycle paths within the Estate Road and internal road reserves has been assumed. Additionally, it is likely that road cycle routes will be accommodated within minor access streets around the site, and through public domain areas providing connectivity to the local area.

To encourage the use of public transport, the proposed road hierarchy is designed to accommodate a potential extension of bus services that currently run along Anzac Road and Moorebank Avenue. The provision of public transport services will ensure the connectivity of the SIMTA site with surrounding neighbourhoods and to the established transport systems serving the greater metropolitan area.

MOOREBANK AVENUE - SECTION



MOOREBANK AVENUE - PLAN



Figure 12 - Road Network 1: Moorebank Avenue Frontage



Figure 13 - Road Network 2: Estate Road



Figure 14 - Road Network 3: Internal Road 1



Figure 15 - Road Network 4: Internal Road 2

04.5 building siting and setbacks

A key element in maintaining visual character is the visibility of the development when viewed from the public domain. The streetscape is an important and prominent interface within the development between built form, landscaped areas, open space and the roads themselves.

The proposed design principles for building siting and setback in this regards have been prepared in consideration of local planning policies and the intended varied nature of uses across the site.

objectives

- To define building envelopes within each land use type by specifying minimum setbacks consistent with local planning policy;
- Ensure attractive streetscapes and quality landscaped settings around the built form;
- To permit where practical, setbacks to be integrated within landscaped areas, assuming the integration of environmentally sustainable measures and streetscape elements to achieve a satisfactory level of attractiveness from the view of the public domain;
- Ensure an appropriate visual presentation of the built form with respect to bulk and scale; and
- Clearly define and reinforce public domain areas through the integration of sufficient amenity and landscaping with natural vegetation.

design principles

It is proposed that the following principles shall apply and no building shall be erected on land within:

- 18m of the front property boundary to Moorebank Avenue;
- 7.5m of the front property boundary to the Estate Road;
- 6m of the front property boundary to Internal Road 1;
- 6m of the front property boundary to Internal Road 2; and
- 2.5m of the side and rear boundaries for any building and hardstand area.

04.6 building heights

It is proposed that building heights will be substantially in accordance with local planning controls based on zoning and the intended use in each SIMTA precinct (see Figure 16).

Height limitations will not only apply to buildings on the site, but also static and mobile equipment and facilities such as gantry operations and container storage within the intermodal terminal.

To this end, the following height controls are proposed for the SIMTA development:

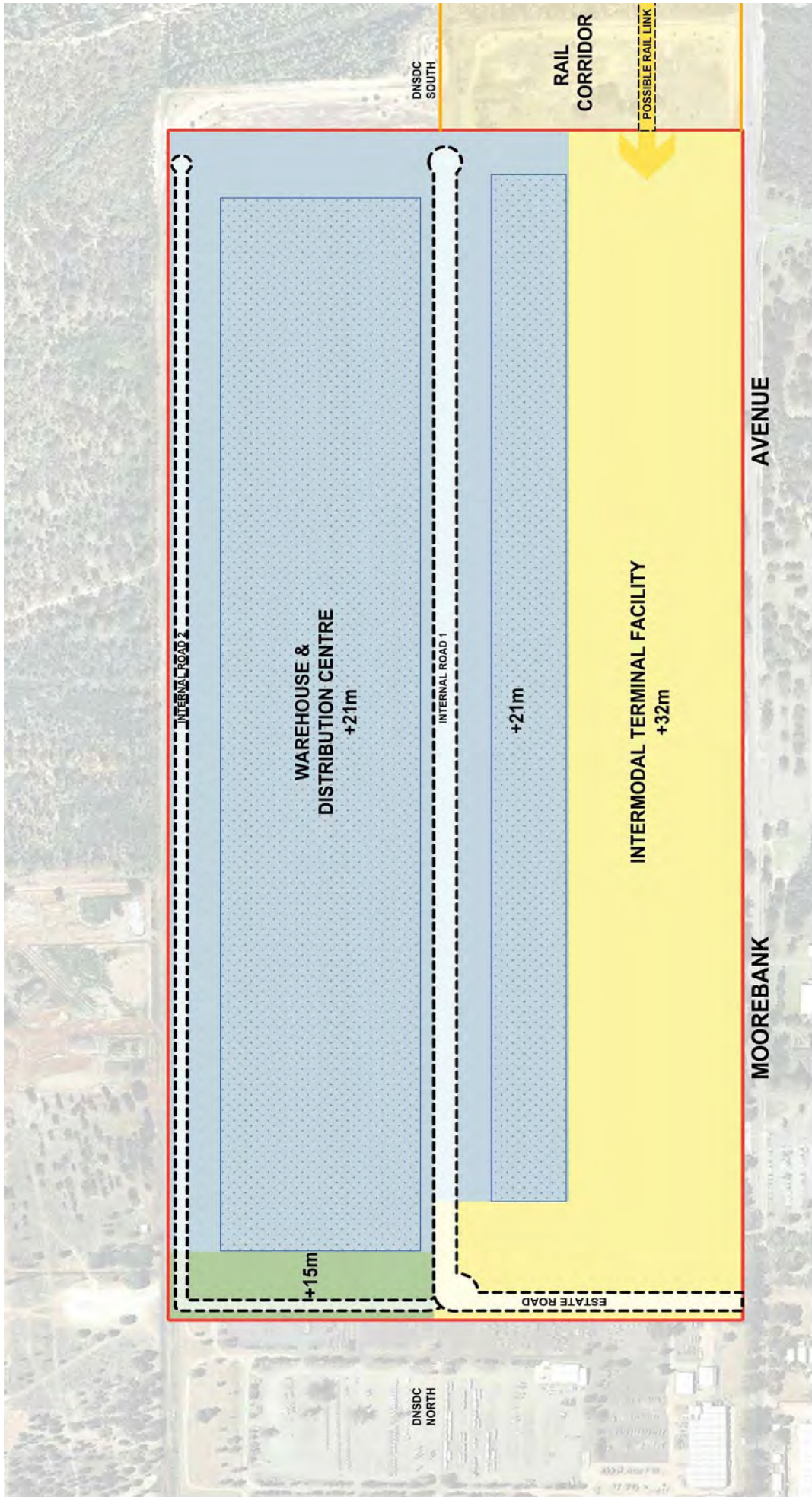
- The intermodal terminal development is to include a supporting high-tech container yard which may include various materials handling equipments such as container gantry systems and automated sortation devices to operate to a maximum height of 32m;
- Warehouse and distribution facilities zones shall have building heights that shall not exceed 21m high; and
- Buildings constructed within the 'Freight Village' zone shall have a maximum building height of 15m.

04.7 car parking

Car parking standards on the SIMTA site will meet the demands of workers and visitors who utilise private cars as their mode of transport to access the site. The number and location of car parking spaces on the site will be designed to allow for the safe and efficient movement of all vehicle types throughout the site.

Critical to the use and safety of the vehicular car park areas associated with the development will be the need for adequate provision of shade trees and understorey planting to ensure:

- CEPTD requirements are met;
- Shade is provided for users during summer months;
- Visual diversity exists to maintain character and visual interest;
- Low maintenance objectives are achieved; and
- Limited drainage and/or liability to pavements and vehicles alike.



NOTE:
- INTERMODAL FACILITY EQUIPMENT MAXIMUM 31m

04.8 view corridors

The site enjoys a number of view corridors both within the SIMTA site, and on approach from the main Moorebank Avenue frontage (see Figure 17).

The significance of the urban character will be enjoyed mostly by internal views along the SIMTA site road network, and as such special treatments through streetscape, landscape and built form will be applied to enhance the visual experience throughout the site. This will be achieved through the application of landscaping and the built form design principles described in Section 5 of this document.

The view corridors and any visual impacts of the development are described in the Visual Impact Assessment report included in this application.

Primary internal views are summarised below.

Moorebank Avenue: There will be a number of approach views along Moorebank Avenue primarily to passing traffic. Travelling south, the main entry to the SIMTA site will be the focal point and will create a strong entry statement and provide identity to the development.

Further along Moorebank Avenue, strong landscaping and landforms will partially shield the operating environment of the proposed intermodal terminal.

Estate Road: From the main entry point travelling east along the Estate Road, it is envisaged that the entry statement will be continued with landscape and streetscape elements leading to the unique 'Freight Village' zone near the north-eastern corner of the site.

Internal Road 1: From either end of Internal Road 1, the view corridor will identify the scale and magnitude of the logistics environment, however this will be integrated and softened through the design character and articulation of the buildings as well as streetscape and landscape elements such as bio-retention, pedestrian and cycle paths.

Internal Road 2: The views along Internal Road 2 are likely to include landscaped car parking areas to the frontages and office components of large format distribution warehouses, as well as the land beyond the eastern site boundary. Again, views along this road will be integrated and softened through the design character and articulation of the buildings as well as streetscape and landscape elements.

Freight Village: There will be views in and around the 'Freight Village' zone which is likely to include a range of support facilities and amenity for occupants of the site. Incorporation of natural features and public domain elements such as a rain garden or watercourse may be provided.

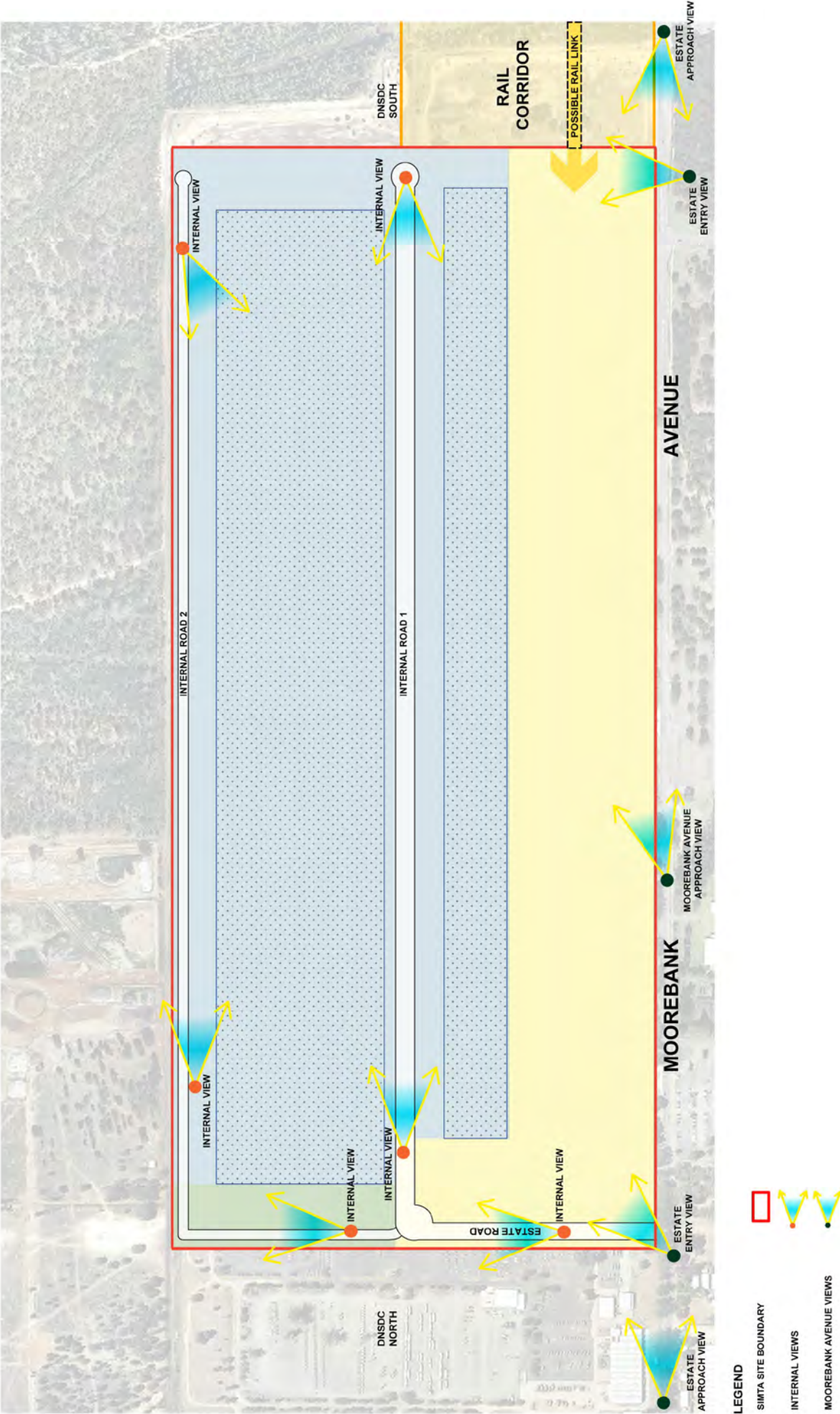


Figure 17 - View Corridors

04.9 signage and lighting

Signage and lighting throughout the entire development will be a critical component of achieving a consistent identity, but will also be paramount to ensure safety, security and efficient way finding at all hours of operations.

It is proposed that detailed signage and lighting standards will be developed following further consideration of the detailed site layout, however the following general objectives and design principles are considered relevant at this stage of the proposal:

objectives

- To provide adequate signage and lighting throughout the development to enhance the quality and experience of the occupants and users, particularly with regard to open space, public domain and general amenity;
- Develop a uniquely identifiable, marketable and appropriate character for the SIMTA site through the creation of signage packages both precinct-wide and by land use;
- Ensure that signage promotes and enhances safety, security and efficient way-finding for pedestrians, cyclists and vehicles at all hours of operation;
- Ensure that signage actively contributes to the safety and amenity of the entire estate, and is sympathetic to any natural and modified landscape and vegetation during the day time and night time; and
- Ensure that all signage is of a high quality of design and construction, and considers longevity and environmental sustainability where possible.

design principles

- Signage within each land use precinct should be designed to integrate with building scale and relevant access and egress areas;
- Freestanding signage should be integrated within landscape where possible;
- Lighting is to be designed and managed to mitigate light spill impacts on fauna, habitat and any adjoining developments or residences, but must be maintained to a level sufficient for operational standards and site safety;
- Design and lux of any internal or spot lighting shall be designed to avoid off-site or traffic safety impacts such as reflection and glare; and
- Signage fronting Moorebank Avenue is to be designed to complement the architectural character of the built form, the landscape treatments, the sites natural character, and to provide a unique SIMTA identity.

04.10 safety and security

Ensuring appropriate safety and security measures through design, installation of systems and ongoing management will be a critical component of the proposed SIMTA development. These will be considered both on a macro (whole of estate and by land use) and a micro (individual tenants and allotments) basis.

A prescribed set of standards for safety and security is proposed to be developed following further consideration of the Concept Plan application and a detailed SIMTA site layout, however the general objectives and proposed design principles for the site are summarised as follows:

objectives

- To provide a high level of safety and security to the development as well as the community populating surrounding lands;
- Ensure that security needs are evaluated on the basis that they address both individual tenant/user requirements as well as all public areas accessed by a range of internal and external populations;
- Promote appropriate lighting and security systems design to ensure that all employment areas are safe and secure at all hours of operation as well as out of hours; and
- Ensure that the Intermodal Terminal development is both a safe and secure environment for its employees and occupants, and also addresses these issues at a level of equal importance for co-occupants of the SIMTA site and the community external to the site.

design principles

- Create well defined entry points or 'gateways' from individual buildings to street frontages to promote a safe and secure environment through operational isolation and circulation between developments;
- Buildings should, where possible, be designed to overlook public domain areas and provide a level of 'casual' surveillance;
- Visitor and staff parking should be separated from heavy vehicle manoeuvring and loading areas where possible;
- Landscaping elements should not be designed to a scale or in such a way that may compromise a perceived level of security;
- Adequate illumination should be provided to the Intermodal Terminal, warehouse and distribution buildings, 'Freight Village' and public areas at all times where permissible operations are allowed by land use;
- Appropriate and adequate illumination should be considered to define all entrances between buildings, the street, pedestrian and cycle networks to ensure visibility from the public domain;
- Provisions of electronic surveillance to supplement natural surveillance to any part of the development that may be left unattended for extended periods of time;
- A Site Safety Management Plan(s) may be considered and should detail strategies to ensure site cleanliness, maintenance to public areas and building elements as well as general safety and security protocols; and
- Potential development of crime prevention strategies that adapt to the unique needs of the worker community and the problems and situations faced by that community over time.

04.11 water sensitive urban design

A number of water sensitive urban design initiatives are proposed to be implemented as part of the SIMTA development to ensure that any set treatment targets are met. These include the following.

Rainwater tanks: are required to meet the water conservation controls set by Liverpool Council's Liverpool Development Control Plan (2008) for development in Moorebank Defence Lands and also to satisfy sustainability building requirements. Rainwater tanks may be used to collect roof water from the site's warehouses to be used for non-potable water demands for toilet flushing and for outdoor use.

Rainwater tanks also provide stormwater treatment through settling and harvesting in addition to their main purpose of providing alternative source of water for non-potable water uses.

Buffer Strips: are source control measures used to pre-treat stormwater runoff before it reaches the main treatment measures such as rain gardens and bio-swales. Buffer strips are vegetated areas adjacent to drainage lines that intercept diffused stormwater runoff from impervious areas before it reaches the treatment measures, thus removing coarse to medium sized suspended solids and associated nutrients.

Gross Pollutant Traps: are a treatment device designed to capture coarse sediment, trash and vegetation matter carried in the stormwater.

Bio-retention Systems/ Rain Gardens (eco corridor): are bio-retention systems that comprise a combination of vegetation and filter substrate, which provide treatment of stormwater through filtration, extended detention and some biological uptake.

Bio-swales: are bio-retention systems that perform similarly to rain gardens but are generally associated with a longitudinal gradient. Thus they provide runoff conveyance in addition to the water quality treatment through filtration, extended detention and biological uptake. The proposed bio-swales for the Moorebank site have fairly flat gradient. Thus they provide extended detention during their normal operation, with excess runoff discharging to overflow pits. No OSD storage will be provided as part of the proposed bio-swales.

The proposed rain garden (eco corridor) and bio-swale areas for the various catchments of the site, as well as stormwater discharge points are noted in Figure 18.



49 Figure 18 - Water Sensitive Urban Design Principles

05 building design principles

05.1 building design

The built form, open space and landscape elements aim to promote visually pleasing and diverse private and public domain environments.

Both the urban and building design principles proposed in this document generally in accordance with the requirements and objectives stated in sections 1.2 and 1.4 of the Liverpool Development Control Plan (DCP) 2008.

It is intended that the built form shall be varied and interesting to provide an attractive and articulated streetscape. A set of indicative design principles for each land use zone within the SIMTA proposal are further described in this Section of the Urban Design and Landscape Report, however the overarching building design objectives and principles can be summarised as:

objectives

- To create attractive and innovative building designs that reflect and integrate both the world class standard of the overall development, and the natural and aesthetic opportunities of the existing site character and surrounds;
- Provide quality and consistency in the treatment of facades, external finishes and the like;
- Ensure sufficient visual relief is achieved in facade design and elemental articulation where there is significant visual exposure from adjoining sites and the public domain;
- Ensure that the design of the built form establishes a strong relationship between the land use, open space and amenity;
- Promote energy efficiency through building siting, orientation and envelope; and
- Promote a high quality built environment through design that encourages activity on street front elevations, and is supported by landscaping, building and street lighting.

design principles

- The Intermodal development will promote best practice with regard to intermodal design, operations and stewardship, including integrated logistics services, green terminal technology and innovative information technology systems;
- The Intermodal development is to provide a high quality landscape corridor fronting Moorebank Avenue. The quality and finish of any building within the terminal is to be of a high quality also;
- Future proposed warehouse and distribution facility developments are to be accompanied by a site analysis adequately demonstrating site opportunities and constraints with respect to conformity with proposed objectives and any design controls implemented, as well as integration with the site character and surrounds;
- Building form and scale should ideally be addressed at the primary street frontage of any allotment and should provide clear and well lit pedestrian and vehicular access and egress;
- Building facade design should integrate with the streetscape to provide an attractive and fluent connection throughout the development;
- Car parking areas and loading areas should be, where possible located separately and promote functionality, efficiency and safety of any development;
- Buildings should provide effective sun shading to windows, wall surfaces and building entries through the use of design elements such as overhang eaves and awnings; and
- Building forms are to be articulated using roofs and eaves, articulation to long walls and promoting an attractive public interface.

05.2 building materials and colours

The selection of building materials and colours for any development on the site will be appropriate for intended use according to the land use structure. An indicative colour palette, minimum performance and sustainability criteria may be developed following further consideration of the Concept Plan Application, however the objectives and design principles for building materials and colours for the SIMTA development can be summarised as follows (see Figure 19):

objectives

- To establish a system for building quality and uniformity along major internal roads and public interfaces;
- To promote a whole of development consideration to visual attractiveness, quality, environment and safety;
- To encourage the use of various building materials that create visual appeal and interest through well considered facade articulation; and
- To establish a colour palette that is suitable for purpose and integrates with the existing site character and natural environment, whilst satisfying the goals of safety and security through way-finding and building hierarchy according to land use.

design principles

- Prominent building facades fronting public interface areas and main internal roads may consist of a variety of building materials and colours. A blank facade is likely to be prohibited;
- Colour selections should, where possible, follow a development colour palette, unless tenant corporate colours can be used to highlight entries or building focal points without detracting from the stated objectives;
- Building materials should generally reflect the robustness of industrial and business park developments;
- High quality materials should be used at building entry or focal points; and
- Materials that are recycled or considered of high environmental sustainability standard are encouraged to be used where practical and possible.

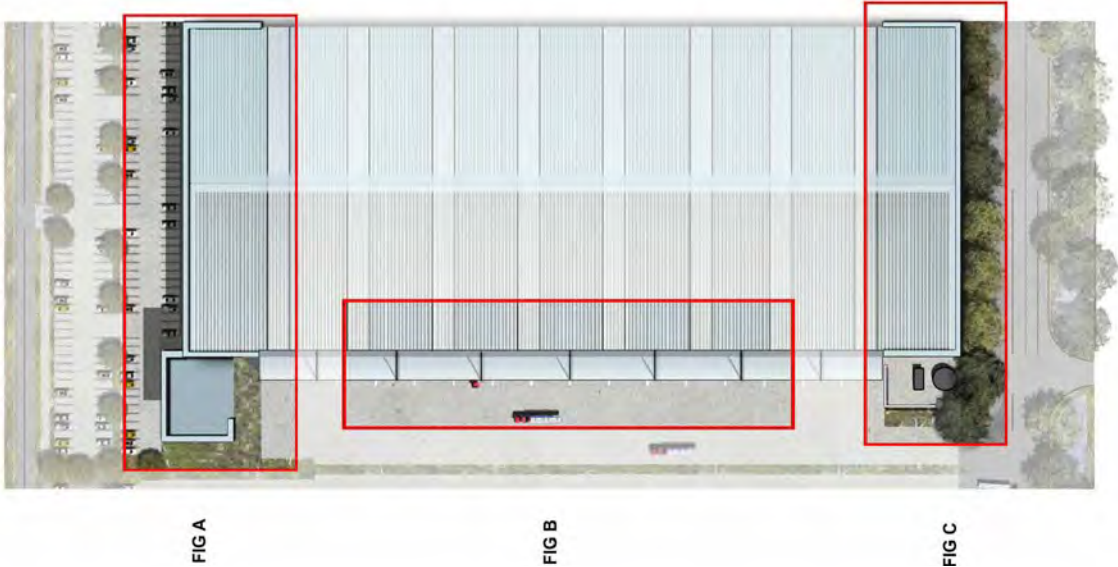


FIG A: INDICATIVE BUILDING FRONTAGE DESIGN



The building entry should be designed to promote street frontage and be distinguished from the balance of the building facade.

FIG B: INDICATIVE LOADING AREA MATERIALS AND FACADE



The loading area should express the robustness and functionality of industrial character and quality of design and material.

FIG C: INDICATIVE INDUSTRIAL BUILDING FRONTAGE



The form of building should express modern industrial character and quality of design and materials. Ancillary buildings, storage and services area should be integrated within the confines of the primary industrial building.

05.3 typical distribution warehouse

It is envisaged that the zone along the majority of the Eastern boundary is likely to contain a mix of large format warehouse and distribution facilities.

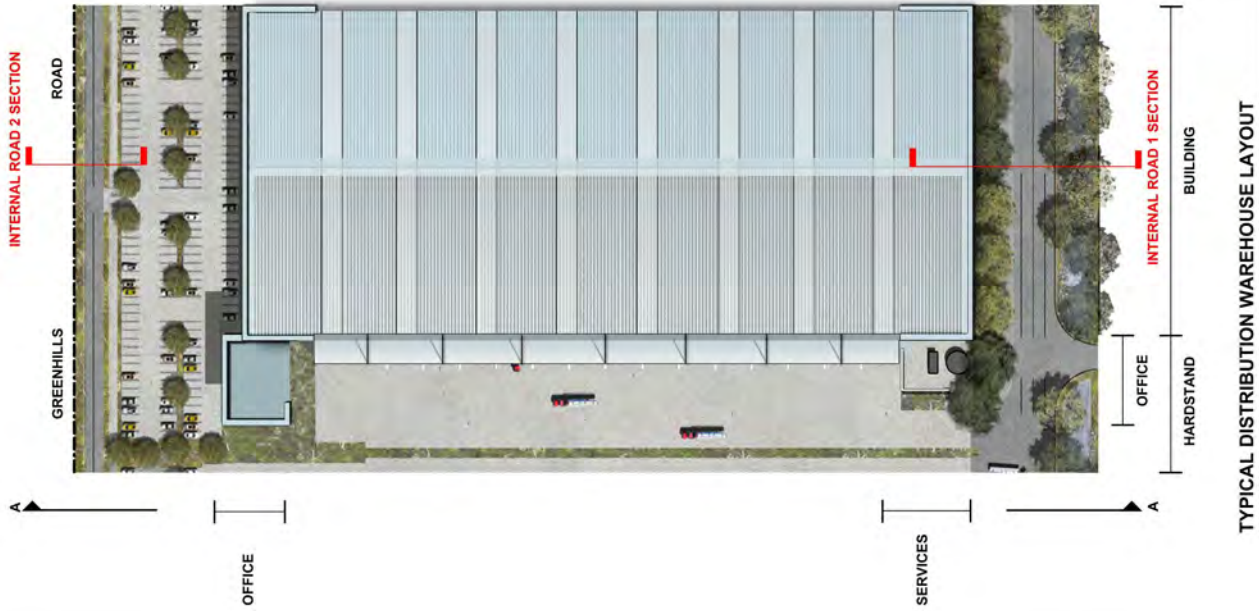
It is assumed that these warehouses will service larger tenants which rely on access to import/export goods and have high turnover of goods. Tenants may include logistics operators who require larger areas for operations, hold stock for longer periods, or undertake larger amounts of freight-breakdown before dispatching.

These warehouses will have perimeter loading docks, with ancillary facilities, such as offices and staff facilities.

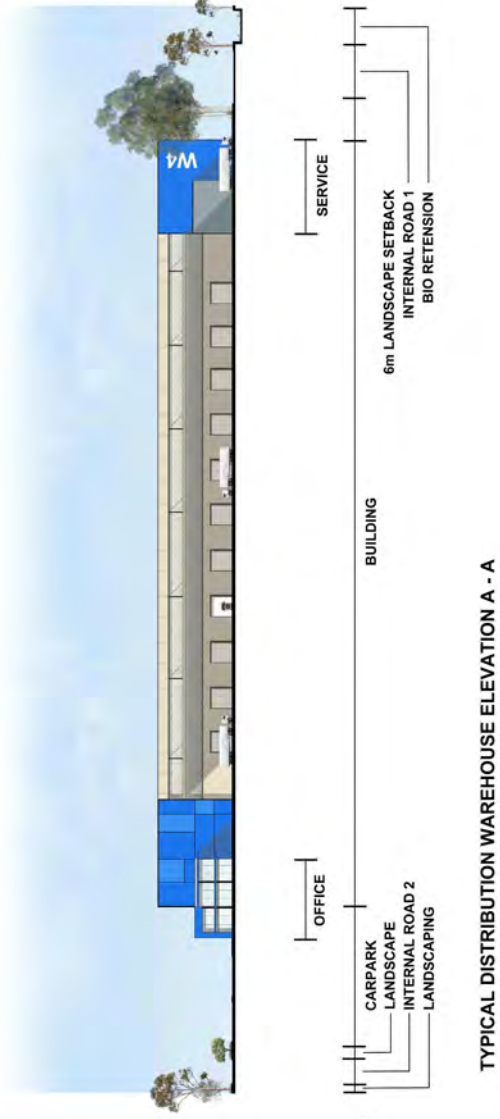
The buildings will be serviced by the central internal road system and separation of staff vehicles to minimise potential vehicle conflicts. Staff services and parking will be situated on the eastern side of these buildings to separate staff movements from heavy vehicles, and to mitigate acoustic and visual impacts of these operations on residential areas and other surrounding sensitive land uses.

Figure 20 included in this section of the report is for reference only and is indicative of the possible form, look and feel of development within this zone, consistent with the Urban and Building Design Principles described in this report.

The exact size, detailed layout and design of each individual facility will be the subject of any future application and will be in accordance with market demand and tenant/user requirements.



INDICATIVE PERSPECTIVE - INTERNAL RD 2



05.4 typical cross dock warehouse

It is envisaged that an area immediately adjacent to and along the Eastern portion of the Intermodal Terminal zone will contain a number of cross dock terminal warehouses and distribution facilities.

It is proposed that these facilities may have the benefit of direct access to the rail terminal and container storage areas and will operate as the terminal handling facilities.

The terminal warehouse zone layout will be designed for cross-dock operations and anticipated to be occupied by large logistics operators dispatching goods in short turn-around times, and with limited freight breakdown.

The location of the terminal warehouses directly adjacent to the Intermodal Terminal is to ensure:

- Operators with high freight turn-over have direct access to automatic container handling;
- Limit distance of majority of freight movements within the site;
- Setback majority of freight movements from residential areas and other sensitive land uses;
- Minimise on-site container freight movements conflicting with on-site vehicle movement paths; and
- Limiting the visibility of the large scale built form from external vantage points, including Moorebank Avenue.

Figure 21 included in this section of the report is for reference only and is indicative of the possible form, look and feel of development within this zone, consistent with the Urban and Building Design Principles described in this report.

The exact size, detailed layout and design of each individual facility will be the subject of any future application and will be in accordance with market demand and tenant/user requirements.



05.5 freight village

A range of ancillary support facilities to meet the needs of employees and visitors are proposed within the SIMTA site in an area referred to as the 'Freight Village'.

While these facilities will principally cater for staff and visitors to the intermodal facility, it is intended that they may also be accessible and available to the wider community.

The ancillary facilities are anticipated to include:

- Site management and security offices;
- Retail and business service centre, potentially including a convenience store, bank, and post office;
- Meeting rooms/conference facilities available for hire by individual tenants;
- Sleeping facilities for drivers;
- A café/restaurant.

The composition of these facilities will be based on demand and will be privately operated by individual tenants.

A centralised staff car parking area may also be provided adjacent to the ancillary facilities. This will enable the separation of heavy vehicle movements from private vehicle movements, particularly around the intermodal terminal warehouses.

Figure 22 included in this section of the report is for reference only and is indicative of the possible form, look and feel of development within this zone, consistent with the Urban and Building Design Principles described in this report.

The exact size, detailed layout and design of each individual facility will be the subject of any future application and will be in accordance with market demand and tenant/user requirements.



06 open space and public domain

06.1 vision

In consideration of the scale of the proposed development, an important element will be the quality of open space and public domain areas and their integration with other land uses.

Although the detailed layout and design of open space and public domain areas will be the subject of any future application, this section is intended to describe the vision for public spaces to ensure appropriateness of the future design and integration with operational facilities on the SIMTA site. For this reason, it has been treated separately to the previously addressed Urban and Building Design Principles.

Perspective imagery is included in this section of the report for reference as a visual aid for the reader to conceptualise how form and function of all the elements described in this document could be addressed. These perspectives are indicative only and are not to be treated as a representation of the completed development.

The objectives and design principles for open space and public domain areas can be summarised as:

objectives

- To provide high quality public open space and public domain areas in and around prominent internal developments;
- To emphasise clear road networks and the interface between land uses;
- To integrate public open spaces and landscape with natural vegetation and water sensitive urban design;
- To create a 'business park' or 'campus' experience throughout the site;
- Develop a framework that is flexible whilst controlling consistency of quality and scale of public spaces as the development evolves in the future;
- Provide safe and efficient circulation for pedestrian, cyclists and vehicles
- Create an integrated water sensitive urban design solution within the 'Freight Village' zone as both an aesthetically pleasing element and an environmentally sustainable water solution; and
- Promote a high quality landscape corridor along Moorebank Avenue.

design principles

- High quality landscape treatments should be applied to Moorebank Avenue and all internal roads;
- Water sensitive urban design principles should be integrated within landscape zones where possible;
- Consider where appropriate the use of acoustic buffers between built form and public/open spaces;
- Separate all heavy traffic from main employee parking zones for developments on the site; and
- Provide safe and secure public access zones in and around each development.

The SIMTA proposal will be developed with a suite of urban elements (see Figure 23) that will become an important identifying signature of the development. The future design manual will provide a list of common urban elements with guidelines for their use, placement and coordination.