

Liverpool Development Control Plan 2008

Part 2.4

Development in

Moorebank Defence Lands

19 February 2014

Part 2.4 must be read in conjunction with Part 1

Liverpool Development Control Plan 2008

Part 2.4 Moorebank Defence Lands

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1. Preliminary

Applies to

1. This section applies to land identified on Figure 1. The land is known as the Yulong, Amiens and DNSDC Defence sites located at Moorebank Avenue, Moorebank.
2. Part 1 also applies.
3. Part 7 does not apply except for non industrial development.

Background

Since the 1990s Liverpool City Council has identified the need for additional employment land within Liverpool LGA to satisfy the increasing demand for business enterprise, to provide jobs for the local workforce, and to provide for a higher order of jobs in high technology industries to match the increasing skill base of the local community.

The Defence land at Moorebank was seen as a suitable area for business enterprise, being located on the M5 Motorway and close to the M7 and in close proximity to the Liverpool CBD.

The DNSDC site lies to the south of Yulong, on the eastern side of Moorebank Avenue. This Part aims to co-ordinate the approach to urban design for these sites.

The area was originally subject to Liverpool DCP No 49, which came into force on 6 June 2003. There is still area that is not yet developed and is accordingly incorporated into this DCP.

The vision for the area includes the following:

- To provide for industrial and business development which contributes to the economic, employment and social growth of the Liverpool Local Government Area, which complements the employment role of Liverpool City Centre, and which due to its nature is not considered suitable for the Liverpool City Centre.
- To provide for the special requirements of industry and business, particularly in the areas of advanced technology and communications, and to cater for the varying needs of employment activities.
- To encourage the development of an industrial and business employment area in a location highly accessible to employees.
- To maximise the opportunities for increased use of public transport, bicycles, and walking and reduced use of private cars.
- To make special provisions for industries using and developing advanced technology products and processes.
- To provide facilities for business and industry by allowing a range of ancillary activities which serve the daily needs of the local workforce.
- To discourage industrial development, which is likely to detract from the amenity of the area by reason of its appearance, noise, emissions and the like.
- To prohibit hazardous and offensive industries and industries where substantial measures are necessary to mitigate the risks or impacts of environmental damage.
- To make adequate provision for infrastructure and facilities to service the development of the area.
- To provide for the use and development of the area in an orderly, efficient and economic manner.
- To promote a high standard of urban design, and

- To provide for ecologically sustainable development outcomes and promote the conservation of Liverpool's unique natural assets.

Planning and Design Principles for Amiens, Yulong & the DNSDC sites

The following principles establish the planning and design framework for the objectives, performance criteria and development controls contained in this DCP and are to be used in the assessment of all development applications or proposed developments.

Urban form and design

The principal objective is to ensure an attractive and high standard of buildings and associated public domain with high visibility from the M5 Motorway. Building design should reflect the high-tech nature proposed for the precinct.

Land use and activities

The aim is to locate the high intensity components of business activities at the frontage to Moorebank Avenue and Anzac Road, with the less intensive components located to the rear of the frontage activities.

Transport

The development of the area, which is likely to occur over a 30 year period or longer, will bring with it major transport improvements in both public and private transport. Moorebank Avenue is proposed to be the future "spine" road for the area.

As the first components of the area, this DCP for the Amiens, Yulong and DNSDC sites seeks to encourage a pattern of development intensity that will support public transport and other travel modes such as cycling and walking through the broader area.

Amenity

The sites covered by this DCP have a variety of natural characteristics, which should be retained and enhanced where possible for the amenity of employees and visitors.

Sustainability

The siting and nature of development should reflect the principles of Ecologically Sustainable Development and seek to conserve and enhance the valuable natural assets of the area.

Objectives

- a) To protect and enhance the environmental integrity of the area.
- b) To ensure a high standard of building design, signage and landscaping, creating an appropriate image promoting the area and the subject sites which form the gateway to the area.
- c) To provide quality landscaped areas in public spaces.
- d) To ensure that development of land is coordinated appropriately.



Figure 1 Land to which this Plan applies

2. Controls for Public Domain

2.1 Street Network

Objectives

- a) To provide an attractive residential street environment
- b) To ensure that entry roads and internal access arrangements are suitable for the anticipated nature and volume of traffic.
- c) To provide for the safe and efficient circulation of traffic
- d) To provide for the safe and efficient movement of pedestrians.
- e) To provide for efficient movement of local bus services.

Controls

The entry roads to both sites should include the following as a minimum:

- 1. 10m carriageway with parking on one side only and two lanes.
- 2. Pedestrian footpaths with a minimum width of 2.5m should be provided on both sides of the road, providing clearly visible connections to the front entry of each building.

3. Controls for Private Domain

3.1 Subdivision, Frontage and Allotment Size

Objectives

- a) To accommodate the needs of industry and employment while ensuring that all allotments are of sufficient size to function efficiently.
- b) To ensure the provision of sufficient space for parking, loading and unloading of vehicles, management of stormwater runoff, and landscape.
- c) To ensure that subdivision of key gateway sites should be large enough to allow scope for innovative site planning and suitable building outcomes. Perimeter frontage sites should comprise larger allotments while internal lot sizes can be smaller.
- d) To enhance the quality of the streetscape in industrial areas.
- e) To conserve the sites' natural and cultural heritage assets.

Controls

1. The minimum area of a lot for development of an industrial use is 2,000sqm.
2. The minimum frontage of a lot for development of an industrial use along Moorebank Avenue is 65m.
3. The minimum frontage of any lot for development of an industrial use (other than those located on Moorebank Avenue) is 30m.
4. Development shall conform to Council's adopted industrial subdivision design principles.

3.2 Site Planning, Building Form, Style and Streetscape

Design quality of buildings

Objectives

- a) To encourage a high standard of architectural design for all buildings.
- b) To ensure that buildings visible from the M5 and along the frontage of Moorebank Avenue in particular are of the highest design quality.
- c) To encourage the development of buildings with facades which are designed with a balance of horizontal and vertical elements.
- d) To ensure that the location and design of buildings, car parks and pedestrian areas are designed to promote safe pedestrian access and encourage the use of public transport.
- e) To ensure energy efficiency is a key consideration in building design.

Controls

To avoid monotonous images to these key frontages, facades should seek to achieve the following:

1. A balance between solid and void.
2. Deep modelling to throw shadows.
3. Expression of structure.
4. Articulation with elements such as sunscreens and awnings.
5. Large areas of blank walls are not acceptable to the key frontages.
6. Roof Form: Many buildings will be viewed from a high level from the Moorebank Avenue overbridge. It is important therefore that the "roofscape" be carefully considered and treated as the 'fifth façade'.
7. Any vents or plant rooms shall be designed as an integral design element of the roof and the building as a whole.
8. Colour and materials should provide a continuity of buildings along the frontages.
9. A combination of masonry, steel frames, steel sheeting and glass is considered appropriate.
10. Exposed steel frames should be painted white, a device that would help to unify a diverse collection of buildings.

Design for safety and security (Streetscape)

Objectives

- a) To ensure that personal safety of employees and visitors is an integral part of site planning.
- b) To ensure that clear sight lines and well-lit access routes are provided throughout any development.
- c) To ensure all pedestrian entries and connections to car parks are well lit and visible to enhance the safety and security of employees and visitors.
- d) To ensure that passive surveillance is maximised.
- e) To ensure development creates an active and safe street front.
- f) To ensure development encourages people to use and interact in streets, parks and other public places without fear or risk.

Controls

1. Surveillance should be maximised by orienting buildings towards street frontages.
2. Building frontages and entries should be clearly visible from the street.
3. The entrances of buildings should be easily identified through: signage, lighting, and entrapment spots avoided.

3.3 Setbacks

Street Setback

Objectives

- a) To ensure the conservation of natural assets.
- b) To ensure that building siting creates of a distinctive streetscape character according to the level of roads in the road hierarchy.
- c) To provide an adequate distance between buildings and street alignment for landscaping.
- d) To provide adequate sight distance for safe traffic movement.
- e) To mitigate the potential visual impact of industrial buildings on any adjoining residential areas.
- f) To ensure energy efficient placement of buildings.

Controls

1. Buildings shall be setback in accordance with Table 1.

Table 1

Location	Setback
Moorebank Avenue	18m
Adjoining residential areas	18m
Anzac Road	15m
South Western Freeway	7.5m
Other Roads	7.5m

2. Buildings should address at least 65% of the street frontage.
3. Side and rear setbacks shall comply with the requirements of the Building Code of Australia, subject to the minimum requirement for Landscaping, Access & Parking referred to in this DCP.

3.4 Landscaped Area

Boundary landscaping

Objectives

- a) To establish a landscaped boundary to the precinct.
- b) To reduce the visual impact of buildings and hard stand areas by landscape treatment.
- c) To mitigate the visual impact of development on any adjacent residential, or other sensitive land use through the use of landscape buffers.
- d) To maximise the retention of indigenous vegetation.

Controls

1. Existing indigenous trees within any building setback should be retained where possible, as an integral component of the site's landscaping, to protect local flora habitats.
2. Landscape widths to be provided on rear and side boundaries should relate to the adjacent land use.

3. Where buildings are set back from side or rear boundaries, they shall be setback in accordance with Table 2.

Table 2

Location	Width
Industrial/ Industrial interface	2.5m
Industrial/ Residential interface	5.0m
Industrial/ Open Space (water areas) interface	5.0m
Industrial/ Related uses (commercial and retail) interface	3.5m

Frontages

Objectives

- To establish a distinctive streetscape character for all streets through landscaping of individual sites and adjoining street frontages.
- To provide landscape frontages to all sites in order to create a landscape character.

Controls

- Landscape frontages should be a minimum depth as indicated below:
 - Moorebank Avenue 18 m
 - Local Road Frontages 7.5 m
- Offset or staggered fencing along the front boundary should be considered to enable fences to be screened and reduce potential visual impact.

3.5 Building Design, Streetscape and Layout

Building form

Objectives

- To allow for buildings for employment and industrial purposes which are suitable for their intended use.
- To promote a high standard of urban design.
- To encourage higher buildings fronting key roads, including Moorebank Avenue and Anzac Road.
- To ensure that the buildings make a positive visual contribution to the streetscape.
- To encourage buildings which incorporate vertical elements to achieve good visual exposure.
- To enable buildings which incorporate interesting and well-designed vertical elements including lift towers, structures to contain signage, roof forms, and integrated vents and plant rooms as part of the structure.
- To ensure compatibility with any adjoining residential areas.

Controls

The form of buildings shall be in accordance with Figures 2 & 3.



Figure 2 Building Form

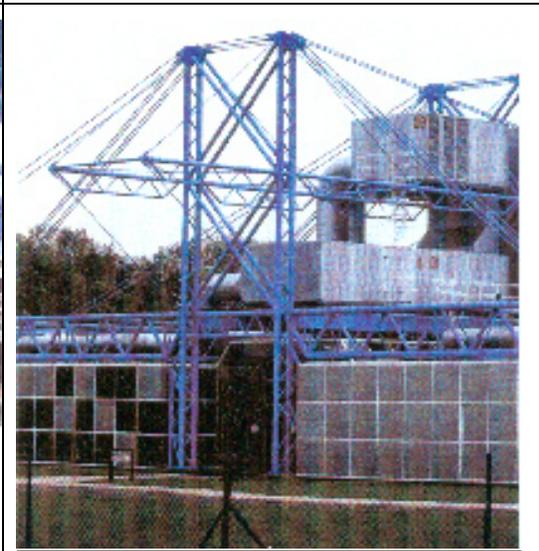
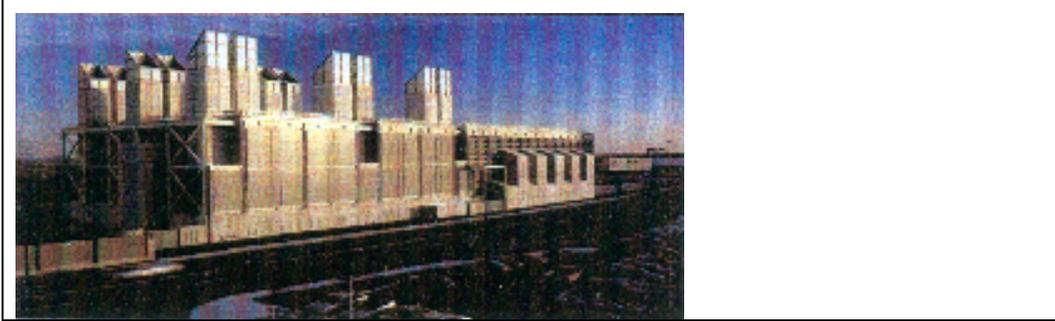
	
<p>Structure should be expressed where appropriate through devices such as external frames.</p>	<p>Building forms should include articulation and variation to reduce perceived bulk</p>
	
<p>A balance of solid and void should be used to give depth and perspective.</p>	<p>Structures can provide a vertical element to buildings.</p>
	
<p>Vents and plant rooms should be an integral component of the building.</p>	
<p>The form of buildings should express modern industrial character and quality of design and materials</p>	<p>The proximity of the Amiens, Yulong & DNSDC sites enables high levels of exposure of new buildings to the M5, is emphasising the need for high quality design.</p>

Figure 3 Building Form

3.6 Car Parking and Access

Objectives

- a) To ensure adequate provision is made for safe pedestrian and cyclist access, and access for the disabled.
- b) To ensure that vehicular movements and parking requirements generated by industrial development are compatible with the amenity and safety of the street system and any adjoining residential areas.
- c) To ensure that surface car parking does not detract from the visual amenity of the street or public domain.
- d) To ensure that all vehicles used by employees and visitors to the development can be accommodated on-site.
- e) To ensure that adequate bicycle facilities are provided.
- f) To ensure pedestrian movements generated by industrial development are compatible with the amenity and safety of the streets.

Controls

1. Car parking at grade or below buildings should not dominate any site. Where car parking occurs in the open and on-grade it should incorporate a 2.5m wide landscape bay for tree planting, with a minimum of 6 - 8 cars in a row to reduce the visual impact of parked cars.
2. Pedestrian and cyclist access to the site should connect with surrounding land uses and, in particular, open space.
3. The side of buildings fronting the M5 and Moorebank Avenue shall not be used for freight loading and unloading, servicing, truck storage or car parking. These activities should be confined to the rear of buildings within the site itself.
4. No pedestrian access is to be provided along the M5 frontage.
5. Pedestrian access should be provided along the Moorebank Avenue frontage.
6. Bicycle facilities are to be provided in accordance with Austroads – Part 14 Bicycles.

3.7 Landscaping and Fencing

Objectives

- a) To ensure retention and enhancement of existing valuable natural features is encouraged for the provision of natural habitat and amenity.
- b) To ensure areas can be landscaped as on-site open space for use by staff and visitors (e.g. the pond on the Amiens site, and tree stands on the Yulong and DNSDC sites).
- c) To ensure landscape treatment utilises these assets and provide interpretive signage as well as seating.
- d) To ensure that other landscape development aims to complement the high standard of architecture and urban design sought for the AREA and the subject gateway sites.
- e) To rehabilitate existing natural vegetation areas and manage the conservation and enhancement of natural processes.

Entries

Objectives

- a) To establish a distinctive entry each development site, to create a sense of arrival and entry.
- b) To ensure entries from Moorebank Avenue should incorporate high quality landscape to set the “image” and character of the area as whole.
- c) To ensure that consideration is given to the use of water features, signage and sculptures as means to enhance entry treatments.

Controls

1. Semi-mature signature trees and shrub planting should reinforce site entries.
2. Trees should be used to create a sense of arrival.

Planting

Objectives

- a) To provide planting which adequately screens car park areas, storage areas and non-compatible land uses.
- b) To provide planting which facilitates a habitat for native fauna.
- c) To provide planting consistent with the climate and soils of the site.
- d) To maximise winter sun, summer shade and wind protection to the office and recreation areas of the sites.
- e) To provide outdoor amenity areas for use by employees.
- f) To use landscaping to reduce the potential visual impact of development.
- g) To encourage landscaping which enhances the amenity of the precinct.
- h) To protect significant vegetation.

Controls

1. All landscape plans are to be prepared by a qualified Landscape Architect or suitably qualified person.
2. All landscaped areas must incorporate shade planting.
3. Landscaped areas are to be physically separated from vehicular movements by kerbs or barriers (wheel stops).
4. Strips of grass less than 1m wide and irregular shaded areas of grass are not suitable. These areas should be incorporated into garden beds.
5. Landscaped areas are to have an automatic irrigation system.

Landscape materials

Materials to be used in the landscape should belong to a consistent theme and family of elements.

Paving

Paving should reflect the function of the area and help to define pedestrian and vehicular movement. Vehicular pavement should be consistent, with parking areas identified by paving and landscape treatment. For example parking areas could allow for infiltration of more site runoff by providing Eco pavers and/or interlocking pavers.

Entries should include more detailed unit paving. A palette of colours and paving types should be developed to enable selection from a consistent range of paving.

Paving selection should consider:

1. Cost effectiveness
2. Safety, slip/skid resistance
3. Maintenance requirements and longevity
4. Visual impact and design

Site Furniture

All furniture, including seating, bollards, litterbins, bicycle racks and car park kerbing and guttering should all be selected as a consistent theme for the Amiens, Yulong & DNSDC sites. This will ensure a cohesive landscape.

Planting and Plant Species

Planting species should be consistent with the landscape themes referred to above. Refer to Part 1 for preferred plant species. The selection of plants should be consistent with the woodland community present on the site.

	
<p>Well-designed landscape providing a high quality entry statement</p>	<p>Example of feature lake providing a parklike setting</p>
	
<p>Example of threshold paving to identify entries</p>	<p>Access road incorporates tree planting, lighting and feature native grass understorey</p>
	
<p>Example of a detailed entry treatment</p>	

Figure 4 Landscaping

Lighting

Objectives

- a) To promote the lighting of buildings and signage as a major design element;
- b) To promote energy efficiency in the design of buildings;
- c) To provide illumination to pedestrian ways and car parks which promote safety and security.

Controls

1. All night time illumination of building facades and corporate signs to provide greater exposure to the site's front.
2. Natural lighting is to be incorporated into building design to minimise energy use.
3. Glazing shall not exceed reflectivity of 20%.
4. Lighting should be serviced by underground cabling.
5. Vehicular, pedestrian and cycle routes throughout the precinct should be well-lit.
6. Illumination at entries and within car parking areas shall be sufficient to ensure a safe and well-lit environment.
7. All pedestrian areas at entries and connections to car parks are to be well lit to enhance safety and security of employees and visitors.

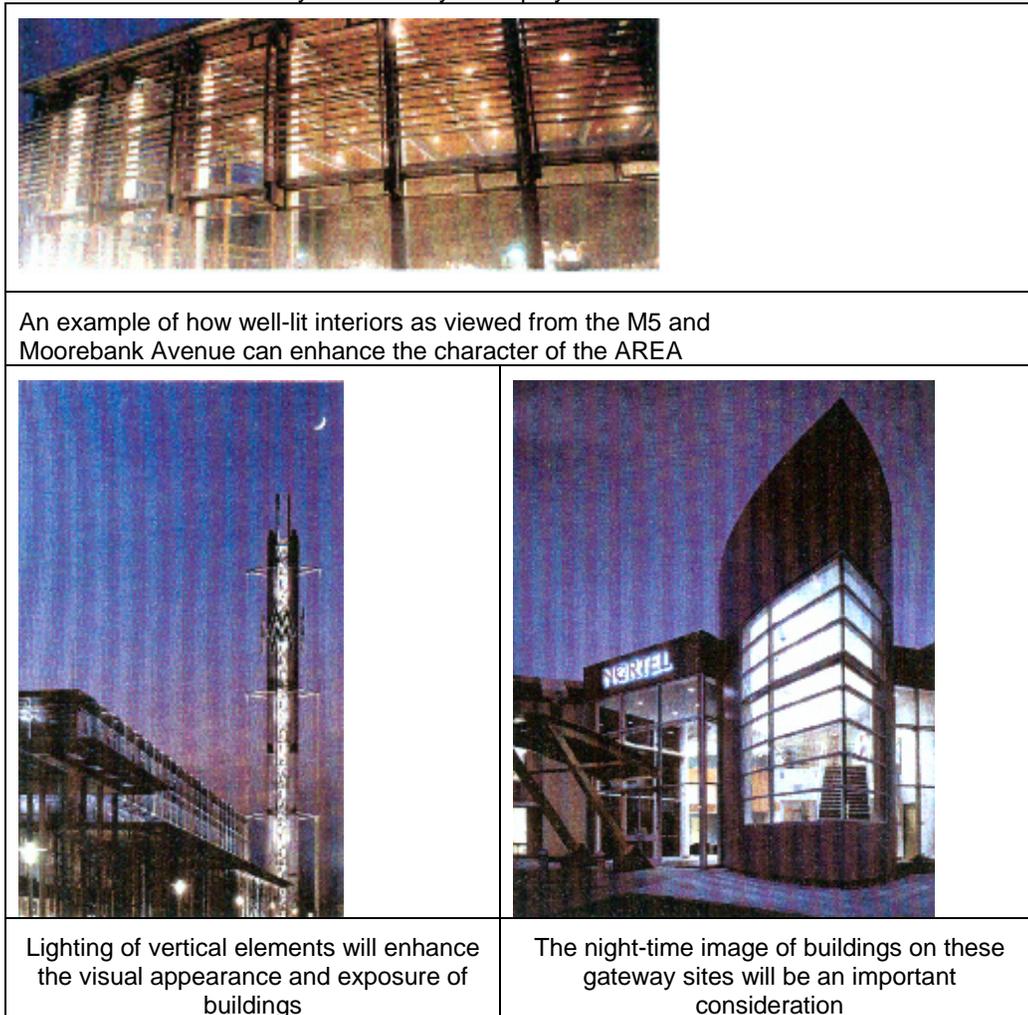


Figure 5 Lighting Treatments

Signage

Objectives

- a) To ensure that signage is carefully designed and used as a positive design element.
- b) To permit the display of information concerning the identification of premises, and the name of the occupier and activity conducted on the land or in the building.
- c) To ensure a coordinated approach to advertising where there is multiple occupancy of site.
- d) To enhance the architectural and landscape presentation of industry so that advertising signs appear proportional to the scale of the building or space within which they are located.
- e) To minimise the negative visual impact of cluttered and untidy advertising signs, in particular at gateway sites and entry points to industrial precincts, so as to promote the townscape qualities of Liverpool.
- f) To ensure that signs do not dominate the landscape or built form.

Controls

1. Corporate names and logos should be integrated as part of the overall design of buildings.
2. Signs should not be located in positions where they may be hazardous to traffic.
3. Direction signs such as those at entrances to sites and buildings should conform to an overall theme for the sites. All signage will be submitted to Council for review to ensure consistency and unity of design. DA plans should show the location and detail of all signage.
4. The number and content of signs is to be minimised to prevent visual clutter.
5. Where a building has a setback from a public road, a sign is permitted within that setback, but no closer to the road than half the setback distance.
6. Low level signage incorporated into the architecture and landscaping of the site is preferred.
7. Where there are multiple-occupancy buildings, an index panel or directory board should be located at the entrance, indicating the name of the building and the occupants.
8. Signs shall be of uniform shape, size and general presentation and similarly located on each unit.
9. No more than one sign is permitted for each unit or occupancy.
10. Roof signs are not permitted.
11. All signage is subject to Council approval, and will be assessed having regard to the following:
 - conformity with the desired future character of the area;
 - whether it complements the dominant character of the area and its landscape;
 - whether it complements the character of a building, site or area, e.g. a historic building, public garden, view of urban landscapes;
 - the number of existing signs;
 - potential effect on traffic and/or pedestrian safety;
 - whether it complements any established theme or pattern of signage;
 - whether it refers to an approved or lawful use of the site or building;
12. The following design factors will also be taken into account:

- number of existing signs on the building (and adjacent buildings)
- placement and visibility
- dimensions (height, width and depth)
- scale (dimensional or proportional relationship to spaces, other physical urban elements including buildings, trees, other signs or people)
- Shape
- Materials, construction details and means of attachment
- Colour
- Purpose of the sign (identification, directional or general advertising)
- Reflectivity
- Means of illumination
- Movement
- Provision of services
- Durability and maintenance implications

	
<p>Corporate signs integrated with building</p>	<p>Lighting and signage will be important in establishing the corporate image of the AREA</p>
	
<p>Well-designed corporate identification signage can enhance the appearance of buildings without detracting from the visual environment</p>	<p>Well-designed and integrated signage can complement architectural style and promote quality building design</p>

Figure 6 Signage Treatment

3.8 Amenity and Environmental Impact

Energy efficiency

Objectives

- a) To encourage built form, landscape and site planning which embodies energy efficiency and ecological sustainability principles.
- b) To ensure development demonstrates appropriate use of energy efficient materials in construction wherever possible.
- c) To ensure development demonstrates appropriate solar access, natural ventilation and use of landscape elements for micro-climate control.
- d) To ensure development demonstrates appropriate application of energy minimisation in industrial processes.
- e) To ensure appropriate application of Water Sensitive Urban Design principles.

Controls

1. All development applications for a specific use of industrial premises are to include a statement of industrial processes and an energy management plan. This shall demonstrate recommended energy saving measures for all industrial processes and energy conservation measures recommended to be incorporated into the building design.
2. Buildings shall be sited to maximise solar access in the winter months and minimise windows facing east and west, or provide adequate screening in summer to keep out low angle sun in the mornings and afternoons.
3. Control solar access to thermal mass by:
 - Overhangs.
 - Shading/screens (some adjustable).
 - Insulation to lightweight structures in eastern/western walls and roof.
 - Use of cross ventilation through the installation of elevated, louvered windows.
 - Use of energy efficient equipment and systems.
 - Incorporating thermal mass by using concrete floors.
4. Incorporate water efficient design principles. Rainwater should be collected and stored within existing water bodies or on-site detention basins for re-use as on-site irrigation:
 - Use porous paving materials to minimise runoff.
 - Collect stormwater in the existing water body on the Amiens site.
 - Polish water from on-site runoff by directing runoff into on-site dry creek gravel beds with macrophyte plants.
 - Use drainage swales adjacent to entry roads instead of kerbs to slow down stormwater runoff and increase on-site infiltration.
 - Consider and design in response to salinity hazard investigations.

Vegetation Conservation

Objectives

- a) To ensure the retention of native vegetation to maintain and improve the ecological sustainability of local habitats.
- b) To provide adequate corridors between adjoining biological areas and ecological communities.
- c) To provide adequate buffers between development and natural waterways.

Controls

1. All significant existing trees or bushland shall be retained or replaced by advanced specimens of the same species.
2. Significant trees and vegetation identified as having habitat value shall not be relocated or removed.

3.9 Site Services

Background

There is a range of services that may need to be provided either on site or within the adjacent road reserve. Owners are required to provide some services and maintain some of the services on the site. Owners must also ensure that services provided on the site are protected from any potential damage.

Objectives

- a) To ensure that the required services are provided.
- b) To ensure that the services provided are easily protected or maintained.

Controls

Letterboxes

1. Letterboxes shall to be provided for individual premises on site.
2. Letterboxes shall be located at front of site and easily accessible from the street.

Waste management

Owners are to provide their own waste management services. These facilities will vary depending on the needs of the site. Any waste management equipment must not be visible from the street. Waste bins must be provided in a designated area that is easily and safely accessible for workers.

Footpaths

Where a footpath, road shoulder or new or enlarged access driveway is required to be provided this shall be provided at no cost to Council.

Frontage works and damage to Council infrastructure

Council must be notified of any works that may threaten Council assets. Council must give approval for any works involving Council infrastructure.

Electricity Sub Station

In some cases it may be necessary to provide an electricity sub station at the front of the development adjacent to the street frontage. This will involve dedication of the area as a public road to allow access by the electricity provider. The front boundary treatment used elsewhere on the street frontage shall be used at the side and rear of the area.

4. Sites

Kitchener House

1. The Yulong site contains a registered heritage item known as Kitchener House, comprising a heritage building, entry gates, and line of historic trees and a garden.
2. Kitchener House and an appropriate curtilage shall be maintained, to retain the memory of previous urban environments; expose previous layers of urban fabric; and enhance the sense of place. A subdivision lot has been created to contain this heritage item and its curtilage.
3. A conservation management plan has also been prepared for its on-going use and management.
4. An appropriate new use should be found for Kitchener House, which requires the least amount of structural alteration to the interior or exterior, in accordance with the objectives of the conservation management plan.
5. To retain an appropriate visual setting, new development should not intrude within its curtilage and should be screened by planting.
6. The scale and character of new development along Moorebank Avenue shall respect that of Kitchener House, and appropriate screening is to be introduced, where necessary.



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