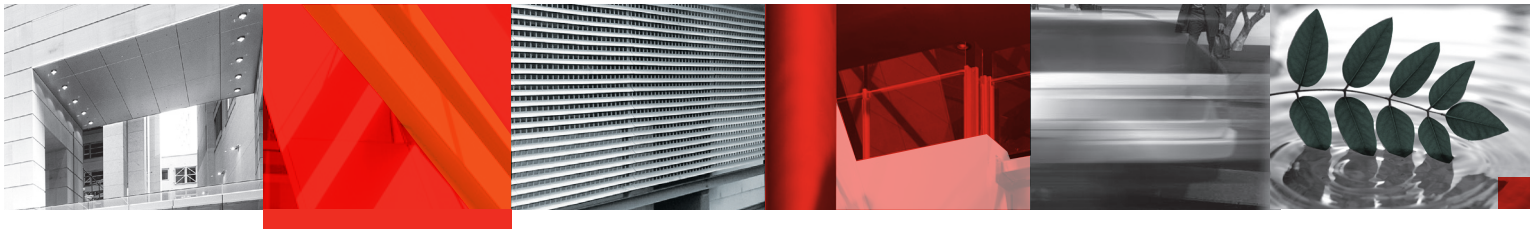


Site Development Guidelines



Lot A DP 392643, Burley Road, Horsley Park Concept Plan and Concurrent Project Application for Employment Lands and Stage 1 Industrial Development

Submitted to Department of Planning & Infrastructure
On Behalf of Jacfin Pty Ltd

August 2012 ■ 10002

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1.0 INTRODUCTION

This Site Development Guidelines document has been prepared by JBA Planning as part of a Concept Plan Application for the proposed Horsley Park Employment Precinct located at Lot A DP 392643 Burley Road. This document has been prepared on behalf of the Proponent Jacfin Pty Ltd and is based on Concept Plans dated August 2012 prepared by JBA Planning.

This report is structured as follows:

Section 2 provides Urban Design Guidelines, including:

- Lot Subdivision
- Setbacks
- Site Coverage
- Built Form and Design
- External Building Materials and Colours
- Entrance Treatment
- Ancillary Buildings, Storage and Service Areas
- Fencing
- Signage and Lighting
- Landscaping

Section 3 provides Traffic and Parking Guidelines, including:

- Local Road Network
- Site Access and Movement
- Public Transport
- Pedestrians and Cycle
- On-site Parking

Section 4 provides Environmental Management Guidelines, including:

- Storm Water Management and Flooding
- Energy and Water Efficiency
- Air Quality
- Waste Management
- Noise

1.1 The Purpose of this Document

The purpose of this document is to provide guidance in the design and assessment of future buildings and roads within the site.

These guidelines seek to encourage high quality, innovative development which meets the needs of future occupants, facilitates the efficient and orderly development of the employment/industrial land, maintains sufficient flexibility to meet market demand, and provides for the environmental amenity of the Precinct.

2.0 URBAN DESIGN GUIDELINES

2.1 Subdivision

Objectives:

1. To ensure that lots are of a shape and size that enables the permissible industrial development in a variety of formats.
2. To ensure that access for all industrial lots will not significantly affect the function, efficiency and safety of the road network.

Controls:

1. The area of a lot does not include the area of any access corridor or right-of-carriageway. The minimum lot size and lot width are as follows:
 - Minimum lot size 5,000m²; and
 - Minimum lot width 20m.
2. At least 20% of the lots must have dimensions greater than the specified minimum for that precinct.
3. Ensure a variety of lot sizes, and where possible, irregular shaped lots and narrow frontages should be avoided.
4. Council may agree to a subdivision which creates battle-axe shaped allotments only where the access handle has a minimum width of 15m.
5. Lots should be designed so that they provide a legible address and visually attractive street frontage.

2.2 Setbacks

Objectives:

1. To encourage buildings that respond to the relative position of the site.
2. To provide an open streetscape with substantial areas for landscaping.
3. To ensure the provision of appropriate buffers to the Regional Road and local roads that softens the visual impact of the development whilst allowing visibility to appropriate development.

Controls:

1. Buildings are to be setback by:
 - 20m from the Regional Road;
 - 7.5m from Local Roads; and
 - 5m for a secondary setback to a Local Road on a corner allotment.

At least 50% of the above building setbacks are to be landscaped. The non-landscaping component of the setback may be used for access driveways, car parking or the like. These building setback areas are to be landscaped, and may incorporate off-street parking areas within the front setback if it can be demonstrated that the location of the car parking area:

- promotes the function and operation of the development;
- enhances the overall design of the development by implementing design elements including landscaping, that:
 - will screen the parking area;
 - is complementary to the development; and

- does not detract from the streetscape values of the locality.
- 2. Storage of any kind is not permitted within the building setback area.
- 3. Zero side and rear setbacks are permitted between allotments subject to meeting fire rating requirements.
- 4. Pedestrian access should be provided to all landscaped setback areas for maintenance and security purposes.
- 5. Setbacks from the eastern and southern boundaries of the site are to be provided in accordance with the landscape plan and sections prepared by Clouston Associates dated August 2012.

2.3 Site Coverage

Objectives:

1. To ensure that adequate area is available to accommodate landscaping, open space for employees and screening of loading and storage areas.
2. To ensure that adequate area is available for driveways and access, onsite parking and manoeuvring of vehicles.
3. To achieve appropriate building setbacks that are landscaped to ensure integration with streetscape and street tree planting.

Controls:

1. Site coverage is not to exceed 65%. Site coverage includes the footprint of all buildings and canopy areas (excluding hard stand areas).
2. Water tanks and temporary structures are not permitted within the front setback area.

2.4 Built Form and Design

Objectives:

1. To encourage buildings that are of architectural merit, diversity, scale and high quality built form.
2. To encourage a built form that contributes to the visual amenity of the site.

Controls:

1. Applicants are to give consideration to optimising building orientation and siting to natural elements such as topography, wind and sunlight, energy efficiency and to maximise weather conditions for loading and unloading.
2. Applicants are to consider a range of fascia treatments, facade treatments, rooflines and building materials to reduce the impact of walls facing the street.
3. The maximum building height is 14m. Taller buildings will be permitted where it can be demonstrated that:
 - the proposed height is in keeping with the character of the locality;
 - the building, or any part thereof, is not visually obtrusive; and
 - the overall design of the development, including landscaping and building materials, reduces the impact of height and bulk of the building.

4. The maximum building height for buildings located at the boundary with Greenway Place properties is RL93.
5. The maximum building height for buildings located at the boundary with the Capital Hill Drive properties is RL94.
6. Goods, plant, equipment and other material resulting from the development are to be stored within a building or will be suitably screened from view from residential areas.
7. Development which can be viewed from or is adjacent to residential properties will require special attention regarding the scale, form and external finishes of buildings, to reduce their visual impact.
8. Development should incorporate the Crime Prevention Through Environmental Design (CPTED) principles where appropriate
9. Prominent elevations, such as those with a frontage to the street or public reserves, must present a building form of significant architectural and design merit.
10. Large elevations should be articulated by structural variations and/or a blend of external finishes. Additionally, the landscape design should consider the scale of the building and where appropriate, the location of and careful selection of plants may aid in reducing the bulk and scale of the building form.
11. Particular care should also be taken in:
 - designing roof elements; and
 - locating plant and mechanical equipment including exhausts, so as to screen them from a public place.

2.5 External Building Materials and Colours

Objectives:

1. To encourage a high standard of architectural design, utilising quality materials and finishes appropriate to the locality.
2. To ensure that new development contributes to the creation of a visually cohesive urban environment.
3. To encourage the innovative use of materials.

Controls:

1. Highly reflective materials, including white or off white metal colours should be minimised. In this regard, the roof material(s) to be used shall not be reflective.
2. Courtyard and screen walls should generally be in the same material as the building facades.
3. The development is to incorporate a variety of external finishes in terms of both colour and type of material used. The external finishes of the development are to be:
 - made from durable high quality, low maintenance materials;
 - compatible with the overall design and form of the development;
 - selected for all built forms to ensure the entire development presents a homogeneous form;

- considered for their ability to provide visual relief in large wall surfaces and elevations; and
 - selected to ensure the development complements the surrounding environment while reducing the temptation to vandalism and graffiti.
4. The elevations of buildings which have a direct interface with residential development shall be finished in colours that are consistent with the landscaped mound so as to reduce their visual impact.

2.6 Entrance Treatment

Objectives:

1. To provide an active frontage and level of surveillance to the street.
2. To ensure an identifiable entrance point to the property and building.

Controls:

1. Entries to buildings should be clearly visible to pedestrians and motorists and be integrated into the form of the building.
2. Architectural features are to be provided at ground level and are to address the primary street frontage.
3. All entrance treatments, such as directory boards, must be located on private property, with appropriate management arrangements to ensure that the ongoing maintenance of such treatments.
4. Entries should be articulated through the use of colour, signage, lighting, material change and texture, and strengthened through landscape design.

2.7 Ancillary Buildings, Storage and Service Areas

Objectives:

1. To provide cohesion to the appearance of the development, ancillary buildings and storage sheds are to be located behind setback lines and be consistent with the design of the main building.

Controls:

1. External goods storage areas are to be appropriately screened.
2. If the development involves the storage of chemicals on the site, the following information is to be submitted prior to construction approval:
 - Detailed description of the use and all methods/procedures associated with the use;
 - A floor plan of the subject premises depicting the dimensions of the building and indicating the internal layout of all equipment, storage and display areas;
 - A comprehensive list is required of all chemicals/goods and quantities proposed to be utilised and stored;

- An analysis of the development in accordance with State Environmental Planning Policy No.33-Offensive and Hazardous Industries;
 - A description of the method of storage of chemicals/goods on the premises and the type of containment or packaging used;
 - A description of the method of transportation of chemicals/goods to the premises including the size and nature of vehicles, proposed routes and frequency of delivery;
 - Details of the number of vehicles likely to be involved and the location of vehicle storage/standing areas;
 - Details of on-site water quality control; and
 - Details of waste treatment and transportation.
3. Open storage areas should not compromise truck or vehicle manoeuvring and car parking areas.

2.8 Staff Amenities

Objectives:

1. To provide facilities for workers.

Controls:

1. Outdoor spaces should be provided for staff. The spaces should be easily accessible from the buildings and should maximise site opportunities such as views and solar access.
2. Opportunities for shade should be provided in outdoor staff amenity areas.
3. Within each development shower and change facilities shall be provided for staff. This is designed especially to encourage employees to access the site by bicycle or on foot.

2.9 Fencing and Walls

Objectives:

1. To provide an appropriate level of security for property owners and contribute to the amenity of the Precinct.
2. To encourage pedestrian access to businesses from the street.
3. To ensure that fences and walls respond to the topography, streetscape and landscape.
4. To enhance the visual outlook of adjoining rural residential properties.

Controls:

1. Fencing does not require development consent if the fencing is:

- below 1.2m in height;
- located behind the landscaping and not on the road alignment; and
- of an "open" nature, eg. decorative metal and coloured green or black.

Fencing proposals that do not meet the exempt provisions, as stated in Point 1, will require development consent. In this regard, fencing shall be a maximum height of 1.8m and of an "open" nature, eg. Decorative metal and coloured green or black.

2. Fencing may be positioned along the front property boundary only if:
 - it is decorative fencing that has an open style appearance (metal, pool type fencing); and
 - the fencing is complementary to the landscaping.
5. Subject to detailed design, a 2m high wall may be included along the eastern boundary (adjacent to rural residential properties) and partially along the southern boundary. Low level landscaping should be included in front of the wall to provide screening.
6. Cyclone fencing may be used on side and rear boundaries which do not front roads.
7. Fencing required for acoustic mitigation purposes shall be suitably screened with landscaping or the like.

2.10 Signage and Lighting

Objectives:

1. To promote an integrated design approach to all signage in character with the locality, and it's architectural and landscape features.
2. To prevent the proliferation of advertising signs.
3. To prevent distraction to motorists and minimise the potential for traffic conflicts.

Controls:

1. All advertising is to be:
 - constructed of high quality, durable materials;
 - considered in conjunction with the design and construction of buildings; and
 - contained wholly within the site.
2. In the case of strata titled factory units:
 - each factory unit development should have a directory board within or near the landscape area listing each firm and their unit number within the complex;

- subject to compliance with the exempt development requirements; and
 - each firm is entitled to have:
 - a sign located on or over the door of the unit so occupied; and
 - another sign placed on the face of the building(s).
3. All lighting installed within the precinct is to comply with Australian Standard AS4282:1997 – Control of the Obtrusive Effects of Outdoor Lighting.

2.11 Landscaping

Objectives:

1. To encourage a well designed, legible and cohesive landscape framework for development/project application.
2. To ensure landscape plans submitted to Council are of a high standard, and that all landscaping is carried out and maintained to an appropriate level on completion of the development.
3. To screen undesirable views and minimise the visual impact of hard surface areas.
4. To enhance the visual outlook of adjoining rural residential properties.
5. To encourage and build upon the landscape of the E2 Environmental Conservation Zone and existing vegetation.
6. To encourage the use of both hard and soft landscape to assist in creating comfortable micro climate conditions, and enhancing the environmental amenity of the development and the Precinct.

Controls:

1. The landscaping directly adjacent to the E2 Corridor should be non-invasive, low and not include any species nominated for that E2 Corridor and should clearly demarcate the boundary of the corridor; low native grasses are recommended. This will allow clear identification of the E2 Corridor and will assist in preserving a distinct corridor.
2. A landscape treatment is to be provided to the eastern and southern boundary where it adjoins the rural residential properties. The treatment is to include shrub planting and clumps of high canopy trees.
3. Native species should be used due to their low maintenance, relative fast growth, aesthetic appeal and suitability to the natural habitat.
4. The landscape may reflect the rural character of the existing site and surrounds. That is, large swathes of grasses should be used, and trees only placed as feature elements, screen elements or to delineate specific areas, such as car parks.
5. Copse of trees should be planted within the dedicated landscape areas in front of the building where large areas of the building facade are exposed to the street.
6. The landscape must conform to the bushfire requirements, specifically when planting within Defendable Spaces. (refer to Australian Bushfire Protection Planners Pty. Ltd. (ABPP) Protection Assessment for details on the bushfire requirements).
7. Prior to lodging an application, applicants should refer to Part 2 Section 2.6 Landscape in the Penrith DCP 2006 to ensure that the level of

landscape documentation submitted with the application is in accordance with that section.

8. Presentation of a building facade to the street should be complemented with appropriate vegetation. The visual impact of large expanses of wall should be reduced in scale by architectural treatment as well as by dense grove planting or other landscape design solutions.
9. Landscape materials should cause minimal detrimental visual impact, and the use of subtle coloured materials and block or brick paving is encouraged. Paving and structures shall complement the architectural style of existing buildings.
10. Consideration should be given to solar access and energy conservation, with the appropriate use of deciduous trees.
11. Plant material in car parks should be used ameliorate views of large expanses of paved areas and parked cars, and to identify entrances to car parks.
12. Island planting beds should be interspersed throughout large parking areas.
13. Landscaping along the mound in the eastern and southern portions of the site is to be consistent with the landscaping principles established by Clouston Associates. Refer to the landscape documents prepared by Clouston Associates dated August 2012.

3.0 TRAFFIC AND PARKING

3.1 Local Road Network

Objectives:

1. To provide adequate vehicular entrance to and exit from the development in a manner that is safe for pedestrians and vehicles using the site and adjacent roadways.
2. To incorporate a road layout that is well connected, displays a legible street hierarchy that will accommodate anticipated traffic volumes and vehicle types, and permits access to allotments via roads.
3. To incorporate a road layout that provides safe access for the needs of all users including large trucks, pedestrians and cyclists.

Controls:

1. Development should comply with the road design principles identified in Roads and Traffic Authority, Road Design Guidelines; and Roads and Traffic Authority, Guide to Traffic Generating Development (1993) in relation to the number, locations and design of any vehicular entry and exit points and/or certain road construction works.
2. All roads and intersections within any internal road network shall incorporate traffic facilities that promote safe and efficient traffic movement, speed control and maximise landscape opportunities.
3. The Local Road design shall be consistent with **Figure 1**.



Figure 1 – Typical Local Road Section

3.2 Site Access and Movement

Objectives:

1. To ensure the safe and efficient movement of vehicles and pedestrians within a development site.

Controls:

1. Truck access, manoeuvring and loading areas are to be separated from car parking areas.
2. Development shall, where appropriate, be designed to:
 - allow all vehicles to either leave or enter the site in a forward direction;
 - accommodate heavy vehicle parking and manoeuvring areas;
 - avoid conflict with staff, customer and visitor vehicular movements; and
 - ensure satisfactory and safe operation with the adjacent road system.
3. Servicing/Loading is only to occur in the zones shown in **Figure 2** **unless it can be demonstrated that appropriate acoustic mitigation measures will be in place and that the proposed development will meet the relevant acoustic noise criteria.**
4. In determining access, servicing and car parking requirements, Council will take the following into consideration:
 - The location, type and scale of the proposed development;
 - The compatibility of the location and design of the car park with adjoining properties;
 - The existing level of on-site parking, in the case of redevelopment proposals;
 - The nature and volume of traffic on the adjoining road network;
 - Traffic Authority Guidelines and comments of the Local or Regional Traffic Committee(s); and
 - The potential for the land use to generate heavy vehicle movements.

Full details of the volume, frequency and type of vehicle movements shall be submitted with future applications.

5. Where the nature of the development will attract clients/visitors to the site, the following elements shall be included in the car park design:
 - the internal (vehicular) circulation network is to be free of disruption to circulating traffic and ensures pedestrian safety; and
 - the movement of pedestrians throughout the car park is clearly delineated by all users of the car park and minimises conflict with vehicles.
6. All internal two-way roadways are to have a minimum width of 7m. Lesser widths may be considered for one-way internal access roads. All internal roadways, circulation and parking areas are to be sealed with a hard-standing, all-weather material.

7. Direction arrows are to be shown on all internal roadways in order to satisfactorily facilitate the movement of vehicles.
8. All loading and unloading must take place on-site. Adequate space is to be provided within the site for the loading, unloading and fuelling (if applicable) of vehicles.



Figure 2 – Loading zones in the southern portion of the site

3.3 Public Transport

Objectives:

1. To integrate Precinct with the existing public transport system where appropriate.

Controls

1. Bus stops, on any designated bus routes, are to be provided at appropriate intervals and locations.
2. The bus shelters shall be provided within the road reserve on any designated bus route.

3.4 Pedestrians and Cycles

Objectives:

1. To provide for safe and attractive walking and cycling environments.
2. To encourage the use of travel by means of cycling and walking.

Controls:

1. Combined pedestrian/cycle links pavements shall be provided in accordance with **Figure 2** below on a 3m wide shared pedestrian/cycle way on one side of the road.
2. Additional pedestrian only paths may be provided on the other side of any Local Road (as illustrated in **Figure 1**) and shall be provided on the other side of any Regional Road.

3.5 On-site Parking

Objectives:

1. To ensure that safe and sufficient car parking shall be provided on each lot to satisfy the likely peak parking demands of the development.

Controls:

1. Parking is to be provided in accordance with the minimum requirements in **Table 1**.
2. One bicycle parking space shall be provided per 10 car spaces.
3. Car parks, aisles and maneuvering areas shall be designed with function and safety in mind, and have minimum dimensions in conformity with the *Australian Standards 2890 - Parking Facilities*. The relevant parts of this standard are *AS2890. Off-street parking*, *AS2890.2 – Commercial vehicle facilities*, and *AS2890.3 - Bicycle parking facilities*.
4. Where parking spaces are to be provided for people with disabilities, these spaces are to be:
 - suitably located near entrances to the building, lifts and access ramps (if required); and
 - provided in accordance with AS1428.1 – Design for Access and Mobility.
5. Parking facilities for commercial vehicles should be designed to accommodate the largest type of truck which could be reasonably expected to park on the site.

All parking areas shall be constructed of hard-standing, all-weather material, with parking bays and circulation aisles clearly delineated.

Table 1 – Car Parking Requirements

Land Use	Minimum car parking requirements
Industrial / Warehouse	<ul style="list-style-type: none"> Office: 1 space / 40m² GFA Factory: 1 space / 100m² GFA for the first 100m², then 1 space / 200m² GFA (includes office component) Warehouse: 1 space / 300m² GFA + 1 space / 40m² office

*GFA (Gross Floor Area) as defined in the Standard LEP template.



Figure 3 - Circulation Plan

4.0 ENVIRONMENTAL MANAGEMENT

4.1 Stormwater Management and Flooding

Objectives:

1. To effectively manage the effects of storm water.
2. To mitigate any risk of flooding.

Controls:

1. Each development site should incorporate rainwater storage tanks.
2. Newly created lots are to drain directly to a piped drainage system, and not to the kerb and gutter.
3. All roof and surface water is to be discharged into Council's stormwater drainage system to Council's satisfaction. No surface drainage will be permitted to discharge across Council footways or reserves, or enter adjoining private land.
4. Water discharge must not contain contaminants, unless necessary licences are obtained from relevant government authorities.
5. Drainage systems must have an adequate capacity to cater for the expected pollutant loading of the development. Details of compliance with the water quality requirements referred to in Section E3 of Fairfield City Wide Development Control Plan 2006 must be submitted to Council as part of this development application.
6. Suitable erosion and sediment control measures shall be carried out during the construction process and subdivision engineering works stages. Details are to be submitted with the Construction Certificate application for the development and/or engineering works attributed with the subdivision.
7. All floor levels of buildings should be a minimum of 500mm above the 100 year ARI flood level. All of the proposed roads should be above the 100 year ARI level.
8. Peak flow rates should be the same or less than that currently existing for the 100 year ARI storm.
9. Stormwater quality should be managed in each Project Application to demonstrate compliance with the targets provided in **Table 2**.
10. A Stormwater Management and Flooding assessment report (to be prepared by a suitably qualified engineer) where any new buildings or earthworks proposed.

Table 2 – Water Quality Targets for the Precinct

Water Quality Pollutant Removal	Target (%)
Gross Pollutants	90
Total Suspended Solids	85
Total Phosphorous	65
Total Nitrogen	45

Source: Brown Consulting Engineer

4.2 Energy and Water Efficiency

Objectives:

1. To promote energy efficiency and reduce potable water consumption.

Controls:

1. Developments should incorporate rainwater harvesting and re-use for irrigation and or/other non potable purposes.
2. The insulation of buildings, where relevant, and installation of energy efficient fixtures and fittings is encouraged.
3. Design should maximise natural light and ventilation in all buildings to minimize the use of mechanical systems. Clear roof sheeting in roof areas should be used to provide natural light into warehouse areas.
4. The office component of the development shall incorporate passive design principles to reduce heating and cooling requirements.
5. Planting of native vegetation that has low water requirements are encouraged.
6. Materials with lower embodied carbon content should be considered during the design and construction of the proposed development.

4.3 Air Quality

Objectives:

1. To reduce detrimental impacts of the development on the condition of air quality.

Controls:

1. The emission of air impurities, as defined under *the Protection of the Environment Operations Act 1997* are to be controlled at all times.
2. Suitable dust control measures are to be employed during construction.
3. Odour control measures are to be employed where required.
4. Details of all external on-site storage and/or processing of potentially airborne materials such as sand, soil, cement or the like is to be submitted with development applications. These materials are to be stored, screened and contained to satisfactorily minimise any potential effects of airborne pollution on surrounding localities.

4.4 Waste Management

Objectives:

1. To reduce the adverse impact of waste disposal and encourage waste minimization and recycling.

Controls:

1. A Waste Prevention and Minimisation Plan to be submitted to the PCA prior to occupation of the development.
2. Incinerators are not permitted for waste disposal.

3. Waste separation, recycling and reuse facilities are to be provided on site and any such waste must be removed at regular intervals as required.
4. In the planning and design of the proposal, adequate area(s) for the storage of on-site waste containers and disposal of trade waste and refuse is to be included. Facilities for the storage of materials that can be recycled should be provided where applicable.
5. Developments that consume high volumes of water in their operation should incorporate recycling initiatives in the plant's operation to reduce the demand on water.
6. All liquids (including water) produced and/or discharged from the site shall not contain pollutants above acceptable levels. Acceptable levels will be determined at the time of consideration of individual proposals and in conjunction with the Department of Environment, Climate Change and Water.
7. Certain liquids (in addition to sewage) may be discharged into the sewer provided a Trade Waste agreement is entered into with Sydney Water. Copies of any Trade Waste agreements are to be submitted with the Construction Certificate application.
8. Measures should be undertaken to ensure all possible pollutants are stored above the flood level. Details of such measures should be provided with the development application.

4.5 Noise

Objectives:

1. To control levels of noise across the development site and to minimise the impacts of any noise generated beyond the site.

Controls:

1. Noise impact assessments must be submitted with applications demonstrating compliance with the noise goals established as set out in **Table 3**.
2. Noise generation from fixed sources or motor vehicles associated with the development must be effectively insulated or otherwise minimised.
3. Any fixed external plant should be located such that the building acts as a noise barrier between the sites. In addition appropriate noise controls should be adopted as necessary. This may consist of barriers, enclosures or silencers.
4. Roof fans should be acoustically treated as determined necessary
5. Reversing alarms on forklifts should be fitted with broadband 'quacker' type reversing alarms.

Table 3 – Noise criteria for the project

Receiver Area	Time Period	Intrusiveness Criterion $L_{Aeq, 15min}$ (dBA)	Project-Specific Amenity Criterion
A	Daytime (7am – 6pm)	38	50
	Evening (6pm – 10pm)	38	45
	Night time (10pm to 7am)	37	40
B	Daytime (7am – 6pm)	42	50
	Evening (6pm – 10pm)	38	45
	Night time (10pm to 7am)	37	40
C	Daytime (7am – 6pm)	36	50
	Evening (6pm – 10pm)	35	45
	Night time (10pm to 7am)	36	40

Source: Wilkinson Murray, August 2012 “Noise Impact Assessment Report”