Regency Green Industrial Estate

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I.0 Introduction

I.I Land to which this Part applies

This Part applies to land zoned INI General Industrial known as the Regency Green Industrial Estate as shown in Figure 1. This site is formerly known as part of the RAAF Stores Depot.



Figure I – Area to which this Part applies.

I.2 Purpose of this Part

The purpose of this Part is to create a quality industrial business estate comprising a range of allotment sizes supported by a functional and high quality public domain (as per the Former RAAF Stores Depot Public Domain Plan).

I.3 Structure of this Part

This Part is structured as follows:

Section 2.0 contains the controls for the built form;

- Section 3.0 addresses open space and landscaping;
- Section 4.0 contains the controls for business identification signs;
- Section 5.0 addresses lighting, privacy and security;
- Section 6.0 addresses ecologically sustainable development principles; and
- Section 7.0 addresses stormwater management.

I.4 Objectives of this Part

- a. To ensure the economic development and use of the industrial zoned land that forms part of the former Regents Park RAAF Stores Depot site;
- b. To enhance and reinforce the existing industrial development in the surrounding area and within the Regency Green Industrial Estate;
- c. To enhance employment opportunities in the area;
- d. To ensure a high standard of industrial development on the site and to encourage this high standard in future development in surrounding industrial areas;
- e. To ensure development responds to its context and is aesthetically and environmentally compatible with the existing built environment and the public domain;
- f. To ensure development contributes to improvements to the public domain;
- g. To encourage design that will enhance the existing character of the locality;
- h. To ensure development adheres to principles of ecologically sustainable development; and
- i. To ensure that redevelopment is integrated with surrounding development.

I.5 Staged development

On 23 June 2004 development consent DA-608/2003 was granted by Council (see Council report 260/04 – CCLO2-04) for the staged development of part of the former RAAF Stores Depot (Lots 102 and 103 DP 1048829). Stage I included subdivision of the site into 41 industrial lots, civil works including roads, drainage and provision of public open space, site re-grading, removal of trees, and landscaping.

The Stage I development consent also approved a master plan (Regency Green Industrial Estate Draft Master Plan, prepared by Woods Bagot, dated May 2004). In addition, condition 2(c) of the development consent required that the industrial development and associated drainage and any ancillary works within each allotment intended for industrial use, be the subject of further development consent pursuant to the provisions of Section 80(5) of the *EP&A Act 1979*.

Note: The relevant provisions within the Regency Green Industrial Estate Draft Master Plan have been incorporated in this Part.

2.0 Built form

Objectives

- a. To ensure that the distribution of floor space is such that the scale of buildings reinforces the desired streetscape character.
- b. To ensure that the built form and scale of development maintains and enhances the amenity and visual quality of the locality, the public domain and adjoining areas.

2.1 Site coverage and setbacks

Development controls

- **DI** The total ground floor area of all buildings shall not exceed 70% of the area of the allotment. Where an industrial building comprises more than one (1) unit, the total ground floor area shall not exceed 60% of the area of the allotment.
- **D2** New buildings along the street frontage shall be setback a minimum of 3m. The setback zone shall not be used for car parking, storage or display of goods.
- D3 In the case of an allotment with side boundaries angled to the road alignment, the setback line shall be perpendicular to the side boundary and the setback shall be 3m at its closest point.
- **D4** Lots to the south of where Building 40 (as shown in Figure 4) was located shall have a 20m front setback in order to retain the existing trees as shown (refer to Figure 3 below).



- 1. 3m soft landscape setback zone with landscaping as required to match verge on opposite side of the road.
- 20% or 3 car parking spaces to the front of the site.
- 3. 2m soft landscaped deep soil zone setback to one boundary, zero setback to other side. 2m to both sides of not using one zero side setback.
- 4. Consolidated open space area built to front boundary incorporating existing trees to be retained.
- 5. Office component to the front of the site.
- 6. Minimum 50% of building built to 20m front setback line.
- 7. Warehouse component to the rear of the site.
- 8. Retain existing trees where possible.
- 9. Servicing, loading and car parking to the rear of the site.
- 10. Zero side setback.
- 11. Pedestrian path to building from public footpath along street.
- 12. Front setback 20m to allow retention of existing trees to be retained.
- 13. 3-4m rear setback/vegetation corridor as required.

Figure 3 – Typical boulevard allotment plan with 20m setback for existing trees.

- **D5** A minimum of 50% of the front facade of the building shall be built to the minimum specified front setback to ensure a strong reading of the street address. A 2m articulation zone shall be allowed.
- **D6** No setback shall be required from internal laneways or minor access driveways.
- **D7** Side boundaries shall have a landscaped deep soil zone of at least 2m where the building is not built to either boundary. Where one side setback is zero the other side shall have a 4m deep soil zone.
- **D8** Rear boundaries shall have a landscaped deep soil zone of 3m unless the lot does not back onto another within the development in this case the deep soil zone will be 4m. This zone shall be planted in accordance with the revegetation plan as shown in Figure 4.



Figure 4 – Revegetation plan.

D9 Allotments bounding Duck River shall have a 30m setback from the mean high water line. Refer to Figure 5 below.



Figure 5 – Setback from Duck Creek (Duck River).

- **DIO** Lots shall use a zero side setback to one boundary except where access is required.
- **DII** Landscaping with appropriate native species shall be provided to setbacks and alongside vehicle access driveways. Refer to Table I- Regents Park plants list.
- **D12** Components of the buildings which incorporate ancillary offices, showrooms and customer service areas shall be located along the allotment frontage and shall be of a high standard of architectural design.

2.2 Allotment size and configuration

Performance criteria

- **PI** Development creates or maintains an overall variety of allotment sizes to facilitate a wide range of industrial, warehousing and related activities.
- **P2** Allotment sizes and configuration enable the efficient siting of buildings and associated activities.

Development controls

DI The average minimum site width shall be 30m. Refer to Figure 6 below.



Figure 6 - Average site width.

D2 Battle-axe allotments accessed by narrow frontages shall not be permitted.

D3 Allotments use opportunities for shared access. Refer to Figures 7 to 9 showing allotment plans for mid-block, corner blocks and multi-unit sites.



- 1. 3m soft landscape setback zone with landscaping as required to match verge on opposite side of the road.
- 2. 20% or 3 car parking spaces to the front of the site.
- 3. 4m soft landscaped deep soil zone setback to one boundary where zero setback to other side. Otherwise 2m to each side.
- 4. Consolidated open space area built to front boundary.
- 5. Office component to the front of the site.
- 6. Minimum 50% of building built to 3m front setback line.
- 7. Warehouse component to the rear of the site.
- 8. Retain existing trees where possible.
- 9. Servicing, loading and car parking to the rear of the site.
- 10. Zero side setback.
- 11. Pedestrian path to building from public footpath along street.
- 12. 3-4m rear setback/vegetation corridor as required.

Figure 7 - Typical mid block allotment plan.



- 1. 3m soft landscape setback zone with landscaping as required to match verge on opposite side of the road.
- 2. 20% or 3 car parking spaces to the front of the site.
- 3. 4m soft landscaped deep soil zone setback to one boundary where zero setback to other side. Otherwise 2m to each side.
- 4. Consolidated open space area built to front boundary.
- 5. Office component to the front of the site.
- 6. Minimum 50% of building built to 3m front setback line.
- 7. Warehouse component to the rear of the site.
- 8. Servicing, loading and car parking to the rear of the site.
- 9. Pedestrian path to building from public footpath along street.
- 10. Zero side setback

Figure 8 - Typical corner block allotment plan.



1. 3m soft landscape setback zone with landscaping as required to match verge on opposite side of the road.

- 2. 20% or 3 car parking spaces to the front of the site.
- 3. 4m soft landscaped deep soil zone setback to one boundary where zero setback to other side. Otherwise 2m to each side.
- 4. Consolidated open space area built to front boundary.
- 5. Office component to the front of the site.
- 6. Minimum 50% of building built to 3m front setback line.
- 7. Warehouse component to the rear of the site.
- 8. Retain existing trees where possible.
- 9. Servicing, loading and car parking to the rear of the site.
- 10. Zero side setback.
- 11. Pedestrian path to building from public footpath along street.
- 12. 3-4m rear setback/vegetation corridor as required.

Figure 9 - Factory unit allotment plan.

2.3 Building height and density

Performance criteria

- **PI** Building height, scale and mass is similar to adjoining development.
- **P2** Building form is designed to avoid detrimental effects upon the amenity and visual character of the locality.

Development controls

DI Building plants/service such as lift motor room, air conditioning equipment and exhausts shall either be concealed from view behind parapet walls or housed within the building envelope entirely.

2.4 Visual quality and building design

- **DI** Loading, storage and external work areas shall be located where the visual quality of the locality is not compromised.
- **D2** Buildings, fencing and landscape treatment shall be used to screen visually obtrusive activities and car parking.

D3 Building facades to street frontages shall be of a contemporary architectural style. Refer to examples in Figures 10 and 11.



Figure 10 - Examples of appropriate architectural character.



Figure 11 - Examples of inappropriate architectural character.

- **D4** Design of industrial buildings shall include:
 - elements which punctuate the skyline;
 - distinctive roof forms;
 - facades with visual variety in materials and form;
 - architectural emphasis on the built form;
 - roof and building form appropriate and indicative of building function;
 - window forms to vary based on orientation and internal functions;

- entrance areas to be visually prominent within overall building form, by use of visual cues such as awnings, roof projections, blade walls or variation in materials scale or form; and
- introduce variation in unit design within building group.

Refer to Figure 12.





- **D5** Walls facing side roads shall be a minimum height of 6.5m.
- **D6** On corner sites, built form shall emphasise the corner by massing and facade orientation. The office component of developments shall be located at the corner and the architectural form shall address the corner of the block by a chamfered footprint to the corner. Refer to Figures 13 to 16.



Figure 13 - Example of chamfered corner treatment.



- 1. Entrance prominently identified by high building form
- 2. Blade walls articulate frontage and frame entry.
- 3. Parapet to cover all plant and equipment.
- 4. External horizontal louvres protect north facing glazing.
- 5. Entrance further articulated and protected by canopy.
- 6. Office windows with spandrel to allow placement of desks against external walls. Horizontal sun shading blades to north facing windows.
- 7. Variety of materials Glazing, rendered blades, masonry to ground building and pre-finished panelling to office block.
- 8. Precast concrete warehouse.
- 9. High level windows for natural light to warehouse.
- 10. Landscape screen planting to warehouse on street frontage.

Figure 14 - Options for building frontages – boxes and blades.



- 1. Entrance set back from front setback articulated and protected by canopy.
- 2. Visible structural elements to articulate building form and illustrate industrial nature of building function.
- 3. Parapet to cover all plant and equipment.
- 4. External horizontal louvres protect north facing glazing.
- 5. Variety of materials Glazing, concrete columns and steel structure.
- 6. Metal clad warehouse.
- 7. High level windows for natural light to warehouse.
- 8. Landscape screen planting to warehouse on street frontage.
- 9. Awning for weather protection to side loading.

Figure 15 - Options for building frontages – scaffolding elements, visible structure.



- 1. Entrance set back from front setback articulated and protected by canopy.
- 2. Parapet to cover all plant and equipment.
- 3. External vertical louvres protect west facing glazing.
- 4. Variety of materials Glazing, concrete structure and timber louvres.
- 5. Precast concrete warehouse.
- 6. Saw-tooth roof form to punctuate skyline and allow natural light penetration into warehouse.
- 7. Landscape screen planting to warehouse on street frontage.
- 8. Office building emphasised by curved architectural form and screens loading behind.

Figure 16 - Options for building frontages - curves and roof form.

3.0 Open space and landscaping

3.1 Landscape treatment

Development controls

- **DI** Large car parking areas shall be broken up using landscape zones. Car parking shall be located so as to integrate with the landscaping and provide a harmonious design for the site.
- **D2** An area shall be provided for outdoor staff recreation (areas for sitting, eating and barbecues) being appropriate to the needs of the particular premises and incorporating adjacent open space or natural areas.

3.2 Landscape

Performance criteria

- **PI** Open space areas within allotments are to comprise a high quality of landscape design to maintain the visual amenity and habitat potential of the locality.
- P2 Adequate open space areas are provided for the amenity of visitors and workers in the Estate.

- **DI** All industrial allotment frontages shall be separate from the street by a minimum 3m wide landscape softworks buffer. This buffer shall contain trees, gravel, lawn and planting to match the verge on the other side of the street. Entrance and access pavements may cross this buffer.
- **D2** A row of trees shall be planted within the 3m wide landscape buffer at the front of all the allotments fronting the George Young Street. The trees shall be planted as part of the future development of the individual lots. The trees shall be *Eucalyptus moluccana* (Grey Box), installation size 100 litre and at same spacing as the street trees planted within the road reserve of the Boulevard. These trees shall be planted at 1m within the site boundary and shall create the outer row of the double avenue of street trees along the Boulevard. The area under these trees shall be turfed.
- **D3** All allotments with a boundary fronting the Princess Road East shall install soft landscaping within the 3m wide landscape softworks buffer. Informal copses of *Eucalyptus leucoxylon* 'Rosea' and entrance feature trees as identified shall be planted within this zone. The area under these trees must be turfed.
- D4 All garden beds shall be edged with a 150mm wide concrete strip.
- **D5** Rear deep soil planting zones shall be mass planted, mulched garden bed in accordance with the revegetation plan prepared for the site where required.
- **D6** All lots shall allow for a pedestrian access path from the pedestrian footpath on the street to the entrance of the building.
- **D7** All unbuilt areas of the site not required for loading, carparking, or vehicle access shall be landscaped. The area of soft landscaping in the form of trees shrubs and lawns shall not be less than 15% of the site area including the consolidated open space area.

- **D8** A consolidated open space area shall be provided on every lot in a distinct area (of proportions of approximately 1:1 to 2:3 or 3:2 width to depth). The area shall be built to the front property line.
- **D9** The consolidated open space area shall be located to the front of the lot and extend to 1500mm past the building setback line and must be landscaped in such a manner to contribute to the overall public domain character of the site.
- **DIO** The size of the area to be provided shall be determined based on lot area. Refer to Figure 17.



Figure 17 - Consolidated open space area table.

- **DII** The consolidated open space area shall be defined by the public footpath along the site boundary, the driveway, building or private paths.
- **D12** The consolidated open space area shall contain street furniture, seating, bins, bikeracks etc, lighting, planting, trees and paved areas (unit paving or gravel). It shall also contain a pergola structure for shade which shall also be built to the front property boundary. Refer to Figure 18.



Figure 18 - Example of a consolidated open space area.

D13 All species planted within the front setback and consolidated open space areas are to be selected from the relevant proposed species list in Table 1.

Table I - Regents Pa	ırk plant list.
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Determinal memory	C	Mature size	Det size	
Botanicai name	Common name	(Ht x sp)	Pot size	
Focal theme trees				
Angophora floribunda	Rough Barked Apple Gum	20 x 6	Advanced, 100L, 3m Ht	
Araucaria cunninghamii	Hoop pine	30 x 6	Advanced, 100L, 3m Ht	
Ficus rubiginosa	Port Jackson Fig	20 x 6	Advanced, 100L, 3m Ht	
Flindersia australis	Australian Teak	15 x 6	Advanced, 100L, 3m Ht	
Jacaranda mimosaefolia	Jacaranda	10 x 5	Advanced, 100L, 3m Ht	
Avenue theme trees				
Angophora floribunda	Rough Barked Apple	20 x 10	Advanced, 100L, 3m Ht	
Corymbia maculata	Spotted Gum	20 x 8	Advanced, 100L, 3m Ht	
Eucalyptus haemostoma	Scribbly Gum	15 x 5	Advanced, 100L, 3m Ht	
Eucaplyptus leucoxylon 'Rosea'	Pink Flowering Yellow Gum	12 x 6	Advanced, 100L, 3m Ht	
Eucalyptus sideroxylon	Ironbank	30 x 5	Advanced, 100L, 3m Ht	
Ficus rubiginosa	Port Jackson Fig	12 x 7	Advanced, 100L, 3m Ht	
Jacaranda mimosifolia	Jacaranda	12 x 6	Advanced, 100L, 3m Ht	
Lophostemon confertus	Brush Box	12 x 6	Advanced, 100L, 3m Ht	
Pyrus ussuriensis 'Red Spire'	Manchurian Pear	10 x 5	Advanced, 100L, 3m Ht	
Robinia pseudoacia 'Frisa'	Golden Robinia	10 x 5	Advanced, 100L, 3m Ht	
Tilia cordata 'Green Spire'	Small leaved Linden		Advanced, 100L, 3m Ht	
Ulmus parvifolia	Chinese Elm	8 x 4	Advanced, 100L, 3m Ht	

Botanical name	Common name	Mature size (Ht x sp)	Pot size
Native trees buffer planting			
Acacia decurrens	Black Wattle	15 x 5	250mm Pot, 1.5m Ht
Acacia parramattensis	Sydney Green Wattle	10 x 4	250mm Pot, 1.5m Ht
Allocasuarina littoralis	Black She-oak	10 x 5	250mm Pot, 1.5m Ht
Allocasuarina torulosa	Forest She-oak	20 x 5	250mm Pot, 1.5m Ht
Eucalyptus cerba	Narrow Leafed Red Ironbank	20 x 10	250mm Pot, 1.5m Ht
Eucalyptus eugenoides	Thin-leaved Stringybark	25 x 5	250mm Pot, 1.5m Ht
Eucalyptus tereticornis	Forest Red Gum	40 x 5	250mm Pot, 1.5m Ht
Eucalyptus moluccana	Grey Box	40 x 5	250mm Pot, 1.5m Ht
Syncarpia glomulifera	Turpentine	50 x 5	250mm Pot, 1.5m Ht
Duck Creek open space planting			
Acacia decurrens	Black Wattle	15 x 7	Advanced, 100L, 3m Ht
Acacia parramattensis	Sydney Green Wattle		Advanced, 100L, 3m Ht
Angophora floribunda	Rough Bark Apple Gum	20 x 10	Advanced, 100L, 3m Ht
Banksia integrifolia	Coast Banksia	15 x 5	Advanced, 100L, 3m Ht
Banksia spinuosa	Honey Suckle Banksia	4 x 2	Advanced, 100L, 3m Ht
Casurina glauca	Swamp Oak	20 x 10	Advanced, 100L, 3m Ht
Callistemon salignus	Willow Bottlebrush	9 x 4	Tubestock
Cubaniobsis anacardioides	Tuckeroo		Advanced, 100L, 3m Ht
Eucalvptus eugenoides	Thin leaf Stringy Bark		Advanced, 100L, 3m Ht
Eucalyptus gummifera	Bloodwood		Advanced, 100L, 3m Ht
Eucalyptus haemastoma	Scribbly Gum	20 x 10	Advanced, 100L, 3m Ht
Eucalyptus leucoxylon 'Rosea'	Pink Flowering Yellow Gum	15 x 7	Advanced, 100L, 3m Ht
Eucalyptus robusta	Swamp Mahogany	15 x 7	Advanced, 100L, 3m Ht
Feature shrubs			,
Dietes grandiflora	Wild Iris	0.6 x 0.6	200mm pot
Dorvantes excelsa	Gymea Lily	1.5 x 0.6	200mm pot
Pennisetum aloebecuroides	Eountain Grass	0.6 x 0.6	200mm port
Plumbago auriculata 'Blue'	Blue Plumbago	1.2 x 1.2	200mm port
Phormium tenax 'Maori' Maiden'	Yellow Leaf Flax	0.6 × 0.6	200mm port
Native shrubs			
Anigozanthus flavidus 'Bush Gem'	Dwarf Kangaroo Paw	0.6 × 0.6	200mm port
Banksia spinulosa	Banksia	1.5 x 1.0	200mm port
Bursaria spinosa	Sweet Bursaria	1.5 x 1.5	200mm port
Callistemon citrinus	Lemon-scented Bottlebrush	2.5 x 2.0	200mm port
Dianella revoluta	Mauve Flax Lily	0.6 x 0.6	200mm port
Dillwynia luniberina	Prickly Parrot-Pea	1.0 x 1.0	200mm port
Kunzea ambigua	Tick Bush	25×15	200mm port
I omandra longifolia	Long-leaf Mat Rush	08×08	200mm port
Lomandra multiflora	Spiny Leafed Mat Rush	0.8 × 0.8	200mm port
Poa labillardieri	Native Tussock	0.8 × 0.8	200mm port
Westringia glabra	Westringia	12 x 10	200mm port
Groundcovers & climbers		1.2 × 1.0	
Hardenbergia violacea	Native Sarsparella	03×10	150mm pot
Hibbertia aspera	Rough Guinea Flower	03 x 1.0	150mm pot
Kennedia rubicunda	Dusky Coral Pea	03 x 1.0	150mm pot
Viola hederacea	Native Violet	03x03	150mm pot
Boulevard front setback	I VALIVE VIOIEL	0.5 × 0.5	
Anigozanthos flavidus	Tall Kangaroo Paw		Tube Stock
			TUDE SLOCK

Potonical name	Common name	Mature size	Pot size
Botanicai name		(Ht x sp)	
Banksia 'Candlesticks'	Banksia 'Candlesticks'	0.4 x I	150mm pot
Banksia spinulosa	Banksia	1.5 × 1.0	200mm pot
Dietes Bicolour	Wild Iris	0.7 × 0.5	150mm pot
Dianella revoluta	Mauve Flax Lily	0.6 × 0.6	200mm pot
Doryanthus excelsa	Gymea Lilly	1.5 × 0.7	200mm pot
Grevillea 'Moonlight'	Grevillea 'Moonlight'	4 x 2	200mm pot
Lomandra longifolia	Long-leaf Mat Rush	0.8 × 0.8	150mm pot
Lomandra multiflora	Spiny Leafed Mat Rush	0.8 × 0.8	150mm pot
Hardenbergia violacea	Native Sarsparella	0.3 × 1.0	150mm pot
Pennisetum alopecuroides	Swamp Foxtail Grass	0.6 × 0.5	Tube Stock
Phormium tenax 'Maori Maiden'	New Zealand Flax 'Maori Maiden'	x	200mm pot
Plumbago auriculata	Blue Plumbago	3 x 2	200mm pot
Westringa fructosia	Coastal Rosemary	1.5 x l	200mm pot
Westringa glabra	Violet westringa	1.5 × 1	200mm pot
Northern Link Road front setback planting			
Anigozanthos flavidus	Tail Kangaroo Paw	x	Tube Stock
Banksia 'Candlesticks'	Banksia 'Candlesticks'	0.4 x I	150mm pot
Dietes Bicolour	Wild Iris	0.7 × 0.5	200mm pot
Dianella revoluta	Mauve Flax Lily	0.6 × 0.6	200mm pot
Doryanthus excelsa	Gymea Lilly	1.5 × 0.7	200mm pot
Grevillea 'Misty Pink'	Grevillea 'Misty Pink'	3 x 2	200mm pot
Grevillea 'Robyn Gordon'	Grevillea 'Robyn Gordon'	1.5 x 2	200mm pot
Lomandra longifolia	Long-leaf Mat Rush	0.8 × 0.8	150mm pot
Lomandra multiflora	Spiny Leafed Mat Rush	0.8 × 0.8	150mm pot
Hardenbergia violacea	Native Sarsparella	0.3 x 1.0	150mm pot
Pennisetum 'Burgundy giant'	Pennisetum 'Burgundy giant'	1.2 × 0.7	Tube Stock
Phormium tenax 'Dazzler'	New Zealand Flax	x	200mm pot
Phormium tenax 'Flamingo'	New Zealand Flax	l x l	200mm pot
Themeda 'Bush Joey'	Themeda 'Bush Joey'	0.4 × 0.4	Tube Stock
Westringa fructosia	Coastal Rosemary	1.5 x 1	200mm pot
Westringa glabra	Violet westringa	1.5 x 1	200mm pot
General front setback planting			
Anigozanthos flavidus	Tall Kangaroo Paw	l x l	Tube Stock
Banksia 'Candlesticks'	Banksia 'Candlesticks'	0.4 x I	150mm pot
Dietes Bicolour	Wild Iris	0.7 × 0.5	150mm pot
Dianella revoluta	Mauve Flax Lily	0.6 × 0.6	200mm pot
Doryanthus excelsa	Gymea Lilly	1.5 × 0.7	200mm pot
Grevillea 'Moonlight'	Grevillea 'Moonlight'	4 x 2	200mm pot
Lomandra longifolia	Long-leaf Mat Rush	0.8 × 0.8	150mm pot
Lomandra multiflora	Spiny Leafed Mat Rush	0.8 × 0.8	150mm pot
Hardenbergia violacea	Native Sarsparella	0.3 x 1.0	150mm pot
Phormium tenax 'Lime Light'	New Zealand Flax	x	200mm pot
Plumbago auriculata	Blue Plumbago	3 x 2	200mm pot
Poa labillardieri	Common tussock-grass	0.04 × 0.04	Tube Stock
Westringa Fructosia	Coastal Rosemary	l.5 x l	200mm pot
Westringa glabra	Violet westringa	1.5 x 1	200mm pot

D14 The consolidated open space area shall be located to achieve best orientation to create a comfortable micro climate.

- **D15** Public safety through open surveillance of the building frontage shall be achieved at all times.
- **D16** Landscaped areas shall be separated from vehicle areas by a kerb or other effective physical barrier.
- **D17** Landscape planting shall be provided on the overland flow easement and the batter slopes of Lot 47 to Lot 51 DP 1081545 in accordance with the following principles:
 - Planting shall be 100% native with 70% indigenous to the area.
 - Planting of the stormwater easement area shall incorporate riparian species but shall not obstruct the overland flow.
 - The area incorporating the banks surrounding the building platform to the boundary with the reserve shall be fully landscaped with mass planting and clear trunked trees which shall not obstruct the visual connection to the reserve.
- **D18** Fencing shall be integrated into the landscape design theme so as to minimise its visual impact while providing required site security.
- **D19** Warehouse facades on street frontage shall be screened with a landscape buffer unless they are built to the setback line.
- D20 For plant selection, biodiversity, plant supply and specification refer also to the Former RAAF Stores Depot Public Domain Plan.

4.0 Business identification signage

Objectives

- a. To provide coordinated signage throughout the public and private domain that is distinctive and aesthetically pleasing.
- b. To ensure visual impact of signs on adjoining residential areas is minimised through design and illumination standards.

Performance criteria

- **PI** Advertising signs and structures are incorporated within the overall design theme of the industrial component of the site. Refer to Figure 19.
- **P2** Development minimises the visual impact of signs and structures upon adjoining residential areas through design and illumination standards.

Development controls

DI Signs shall be limited to identifying the user/tenant of the industry by their name, logo or trademark. Illustrative advertising of products or services shall not be allowed.



Figure 19 - Distinctive, coordinated signage integrated with development.

- D2 Illumination of signs shall not cause nuisance or annoyance to pedestrians, vehicles or adjoining residential properties.
- **D3** Signs shall be placed so that they do not obscure vehicular sightlines and vehicular control signs.
- **D4** Non illuminated signs shall use reflective material for typography and directional arrows.
- **D5** Word spacing shall be regular and excessive variation in length of lines shall be avoided.
- **D6** Signs shall not be placed above the roof line or parapet.
- **D7** Identification signs shall be placed perpendicular to approaching traffic, no closer than 3m to any property line.
- **D8** One identification sign shall be provided. More than one may be used where a site has more than one vehicular entrance, on different sides of the building or where the nature of the site and adjacent roads require more than one sign for adequate identification.
- **D9** Building identification signage shall be in the form of a single free standing primary signage element. This element shall be setback 2m from the front allotment boundary. Secondary signage may be located on the building facade.
- **D10** The 2m setback area shall be planted with low ornamental plants and shrubs which do not obscure signage and are consistent with the landscape principles of the site. Refer to Figure 20.
- **DII** Signage shall be not more than 1.5m in height and shall incorporate a solid base element 600mm high of stone construction. This is illustrated in Figures 20 to 22.



Figure 20 - Signage - plan view.



Figure 21 - Signage - elevation.



Figure 22 - Signage – sketch.

- **D12** Signs shall not have a front face area greater than $5m^2$ excluding the base wall face area.
- **D13** Signs shall be placed parallel to the road alignment. Where the sign is located after the access driveway for approaching traffic an element of the sign shall be perpendicular to the approaching traffic and as a minimum shall indicate the street number and may be up to 2.5m in height. Refer to Figure 21.
- **D14** Signs on the front facade of the building shall not be greater than 1/3 of the total length of the front facade and not longer than 12m in total length.
- **D15** Identification signs on a secondary street frontage shall be 50% of the size of those on the primary frontage.
- **DI6** Pylon signs shall not be allowed.

5.0 Lighting, privacy and security

5.1 Lighting

Objectives

- a. To provide a functional and coordinated site lighting system which contributes to a safe and visually attractive environment.
- b. To ensure lighting does not cause distraction to vehicle drivers on internal or external roads or to the occupants of adjoining properties and residential land.

Performance criteria

PI The impact of lighting upon adjoining sites, particularly residential areas, is minimised by controlling the intensity, design and location of lighting facilities.

- **DI** Lights shall be placed so as to cause no glare or excessive light spillage on neighbouring sites. External lighting complies with the Australian Standard 4282 (INT) 1995 Control of the Obtrusive Effects of Outdoor Lighting.
- **D2** All parking areas and driveways shall be illuminated to a minimum level of between 25 and 50 lux at ground level. The standard adopted for the surrounding roads is 50 lux.
- **D3** Security lighting fixtures shall not project above the facade of the nearest adjacent building and shall be shielded. Shields shall be painted to match the surface to which they are attached. Security lighting fixtures shall not substituted for parking area or pedestrian path lighting fixtures and shall be restricted to lighting only loading and storage locations or other limited service areas.
- **D4** Exterior wall mounted flood lights shall be prohibited except for security lighting to the rear of buildings.
- **D5** Accent illumination shall be provided at key locations, such as building entries and driveways. The tops of footings of all lighting standards shall be a minimum of 100mm below adjacent surface levels.

D6 Buildings shall be externally lit using a system of lighting that accentuates the architectural features.



Figure 23 - Lighting to emphasise building form.

5.2 Fencing

Performance criteria

PI Fences and walls are designed to ensure that they do not have a detrimental effect on the visual amenity of the public domain.

- **DI** Fencing along street boundaries of a height greater than 1m shall be located behind a landscape buffer with a minimum setback of 3m.
- **D2** Fencing shall be either transparent or integrated into the building form. It shall be designed to ensure its materials and colours blend into the landscape and allow through visual access. Refer to Figure 24.
- **D3** Solid fencing shall be designed to read visually as part of the building form and be constructed of the same or complementary materials to the building.
- D4 Fences shall not be erected in front of landscaping along street frontages.



Figure 24 – Example of transparent fencing.

5.3 Safety and security

Performance criteria

PI The design and ongoing development of the site is consistent with the principles of Crime Protection Through Environmental Design (CPTED).

Development controls

- **DI** Clear sightlines between public and private spaces shall be provided.
- D2 Effective lighting for public places shall be provided.
- **D3** Landscapes and physical locations that channel and group pedestrians into target areas shall be provided.
- D4 Access to internal areas or high risk areas shall be restricted.
- **D5** Design shall incorporate clear transitions and boundaries between public and private space.
- **D6** Space management strategies shall be undertaken, including activity coordination, site cleanliness, rapid repair of vandalism and graffiti and replacement of burnt out lighting.

6.0 Ecologically sustainable development principles

Objectives

- a. To encourage a high standard of environmental design.
- b. To minimise energy use in buildings while providing a comfortable working environment.
- c. To substantially reduce carbon dioxide emissions compared to similar developments through the design of buildings.

d. To minimise potable water mains demand of non residential development by implementing water efficiency measures.

Performance criteria

- **PI** Buildings are designed to minimise energy consumed for heating and cooling
- P2 Buildings reduce reliance on existing energy supplies through the use of renewable energy technologies.
- **P3** Water efficiency is increased by appropriate building design, site layout, internal design and water conserving appliances.

- **DI** Buildings shall aim to achieve a north-south orientation.
- **D2** Air conditioning shall be zoned to enable the most efficient heating and cooling of the building.
- **D3** Roof and wall insulation shall be used in office components of buildings to reduce winter heat loss summer heat gain.
- **D4** Cross ventilation shall be maximised by using high level roof ventilators. Where practical and appropriate, skylights and/or wind powered ventilators are to be installed.
- **D5** Stairwells shall be positioned to create a stack effect to enhance natural ventilation to upper floors.
- **D6** Windows shall be protected from summer sunlight by eaves and sunshade devices where appropriate.
- **D7** Buildings shall be finished in lighter colours to increase heat reflectivity.
- **D8** Low energy lighting shall be used.
- **D9** Buildings shall use renewable energy technologies, including:
 - photovoltaic cells;
 - battery storage; and
 - natural ventilation.
- **D10** Water conserving landscape techniques shall be employed; such as drought tolerant species selection, soil additives, irrigation zoning, limited turf areas and planting to reflect micro climates.
- **DII** The ancillary office component of development shall be to the north of the site.
- D12 Roofs shall be designed to maximise penetration of natural light.
- **D13** Landscaping shall be used to shade exposed walls from summer sun. Deciduous species shall be included where summer shade and winter sun is desirable.
- **DI4** All developments shall reuse grey water wherever appropriate, feasible and practical.

- **D15** New developments shall connect to recycled water if serviced by a dual reticulation system for permitted non potable uses such as toilet flushing, irrigation, car washing, fire fighting and other suitable industrial purposes.
- **D16** Where a property is not serviced by a dual reticulation system, development shall include an onsite rainwater harvesting or an onsite reusable water resource for permitted non potable uses such as toilet flushing, irrigation, car washing, fire fighting and other suitable industrial purposes.
- **D17** Development shall install all water using fixtures to meet the WELS (Water Efficiency Labelling Scheme) rated industry standards.

7.0 Stormwater management

Objectives

- a. To take advantage of opportunities for the multiple use of stormwater management areas for recreation and amenity.
- b. To avoid stormwater discharge impacts on downstream properties and natural waterways.
- c. To protect water quality and minimise gross pollutants leaving the site.
- d. To reduce the pressure of new development on existing water supply and drainage infrastructure.
- e. To treat and manage stormwater in an equitable manner for all future occupants of the estate.
- f. To incorporate highly innovative financially responsible water quality management strategy.

Performance criteria

- **PI** Stormwater drainage is designed to integrate with landscape concept plans prepared for the site.
- P2 Drainage design minimises the environmental impact of stormwater run-off.
- **P3** Stormwater management systems provide the community with opportunities for the reuse of stormwater.
- **P4** Lot owners are responsible for management of stormwater on their site in terms of both water quality and quantity.

- **DI** The drainage system has the capacity to accommodate the 1-in-100 year flood event without risk or damage.
- **D2** The stormwater drainage system shall be integrated with the landscape concept plan.
- D3 The maximum permissible site discharge (PSD) and minimum site storage requirement (SSR) shall be in accordance with the Table 2.

 Table 2 - Maximum permissible site discharge.

PSD Zone	Description of zone in which the proposed development is located	PSD L/S/ha	SSR M ³ /ha
I	Duck River Catchment – generally bounded by Duck River, Park Road, Rose Crescent and the M4 Motorway	80	530

Specific details relating to boundaries are to be confirmed with Council's Drainage Engineer.

- D4 Detention storage shall not be located in any natural watercourse or overflow flow path, and functions independently during any events up to and including Council's 100 year ARI event.
- **D5** On-site detention basins shall be provided with an overflow spillway directed towards the trunk drainage system.
- **D6** On-site detention storage shall be designed so that run-off is stored underground.
- **D7** All stormwater quality control structures shall have the capacity to intercept and filter runoff from the one (1) year average recurrence storm event.
- **D8** Gross pollutant traps and devices shall be located underground with readily available access for maintenance or are screened.
- **D9** Development shall comply with the Stormwater Drainage Part of this DCP.
- **D10** Stormwater management shall be undertaken in accordance with the principles contained in the Water Cycle Management Plan prepared by Storm Consulting dated November 2003.
- **DII** On-site detention for the industrial estate shall be provided for each lot.
- **D12** Each lot shall provide water quality treatment consisting of oil and grease separation, gross pollutant and nutrient retention.