

MANGO HILL INFRASTRUCTURE DEVELOPMENT CONTROL PLAN

Sector Plan No. 019-6000

for

**Town Centre Frame “C” Sector Six
Corner Discovery Drive / Endeavour Boulevard**

Town Centre Frame “C” Precinct

North Lakes Development

27 June 2006

(Approved by Council on 27 June 2006)

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1.0 Introduction and Statutory Context

- 1.1 The Mango Hill Infrastructure Development Control Plan (DCP) provides a process for development of land in the DCP area and for the creation of a Sector within a Precinct and the preparation by the Principal Developer of a Sector Plan in accordance with the relevant provisions of the DCP.
- 1.2 This document constitutes the Sector Plan for the **Town Centre Frame “C” Sector Six – Corner Discovery Drive / Endeavour Boulevard** (Sector Plan).
- 1.3 The location of the Sector within the DCP area is shown on *Figure 1 – Planning Context*. As illustrated on *Figure 2 – Cadastral Boundaries*, the Sector is bounded by:
- (i) The balance of Town Centre Frame “C” Precinct (Precinct Plan 019) to the north;
 - (ii) Endeavour Boulevard to the south;
 - (iii) Discovery Drive to the east; and
 - (iv) Part of Lot 982 on SP 169080 to the west designated as Town Centre Frame land use element under the DCP
- 1.4 The location of the Sector within the Precinct Plan area is shown on *Figure 3 – Precinct Plan Map*.
- 1.5 This Sector Plan is the code of development for the land in the Sector. In the event that this Sector Plan does not provide development requirements, then the Planning Scheme provisions relevant to the particular form of development apply.
- 1.6 The DCP, approved Precinct Plans and approved Sector Plans are to be read in conjunction with the planning scheme and Council’s local laws, policies and codes and to the extent the DCP, Precinct Plans and Sector Plans do not modify provisions of the Council’s planning scheme, local laws, policies and codes they will apply to the DCP area.
- 1.7 To the extent the provision of Council’s planning scheme, local laws, policies or codes are modified by the DCP, Precinct Plans or Sector Plans, then the provisions of the DCP, the Precinct Plans or Sector Plans will prevail.
- 1.8 Development in the Sector must comply with the provisions of the Sector Plan.

2.0 Land Use Rights

The final specification of land use rights for land in this Sector is contained in *Appendix A – Final Specification of Land Use for the Sector*.

3.0 Development Requirements & Guidelines

3.1 INTRODUCTION

Clause 2.4.2 of the DCP indicates that a Sector Plan must specify the requirements for land use, development and car parking for land in the Sector. Guidelines must also be specified for design and siting, landscaping and signage within the Sector.

3.2 DEVELOPMENT CONCEPT

The Sector is located at the intersection of two (2) major thoroughfares being Discovery Drive and Endeavour Boulevard. Discovery Drive leads to the residential development north of the Sector and Endeavour Boulevard serves the Town Centre and the future Mixed Industry and Business Area (MIBA) to the west. The development concept for this Sector is for low-density, low-medium rise commercial development that requires accessibility, without requiring visibility from Anzac Avenue and the Bruce Highway. As such, it is expected that areas adjacent to Discovery Drive provide a range of opportunities for retail services, offices including government agencies, commercial services and special uses such as police services which complement the range of facilities provided within the Town Centre. A police station is expected to be established within this sector.

Development with frontage to Discovery Drive is to have a high level of contemporary architectural design and is to address the street in order to contribute to its 'boulevard' character. Discovery Drive is envisaged as a wide streetscape with dense landscaping along the verges and median strips. On-site landscaping should be integrated with the design of the building to allow visual exposure of the buildings from the road, but still provide screening or relief to building walls and car parking areas. Some car parking is permitted between the buildings fronting Discovery Drive and Endeavour Boulevard, however the majority of car parking shall generally be located behind the building. Where surface car parks are located adjacent to the street, these areas are to be substantially screened, where possible, with vegetation including canopy shade trees. Any planting adjacent to vehicular and pedestrian access points is to ensure vehicle driver's sightlines are maintained.

To strengthen the urban form and provide visual focus points for the Sector, development within the Sector must incorporate a corner feature treatment. Treatments will include a minimal frontage setback distance, an outward orientated building design to both road frontages, awnings and display windows, where appropriate. The public entry to the building will be a highlight of this corner. The through-route nature of Endeavour Boulevard is to be emphasised through the use of open landscaping along the verges allowing visual exposure of the buildings from the road. Left in/left out access arrangements are proposed for both the Discovery Drive and Endeavour Boulevard frontages to reinforce their primary role as thoroughfares. Due to the security necessary for a police station, sharing of access between neighbouring sites is not expected within this sector. The existing pedestrian footpaths along the frontage of the Sector maintain a connection to surrounding developments, including North Lakes State College.

Development in the Sector should:

- (i) provide for the future policing needs within North Lakes and the surrounding region;
- (ii) be consistent with community expectations of the facilities and services likely to be found in the town centre;
- (iii) ensure connectivity, integration and strong functional and architectural relationships with the commercial developments within the Sector, Precinct and the balance of the Town Centre;
- (iv) ensure that car parking areas in the Sector are enhanced by landscaped vehicular and pedestrian links. Potential conflicts are minimal in front of any points between vehicular and pedestrian movements are to be minimised through considerate design;
- (v) continue the 'boulevard' streetscape and landscaping theme along Discovery Drive to maintain an attractive entry to the residential community to the north of the Sector;
- (vi) continue surrounding 'open' landscape and streetscape themes along Endeavour Boulevard to reinforce the through-route nature of this corridor; and
- (vii) follow best practice environmental principles to minimise environmental harm and protect amenity of the area.

3.3 DEVELOPMENT REQUIREMENTS

3.3.1 In respect of every development in this Sector which involves the erection of a building, the person who undertakes that development or uses the site must, as part of that development or use, unless already provided:

- (i) construct a full width pedestrian pavement to Council's specification for the full length of those road frontages required by Council to the development site;
- (ii) construct concrete kerb and channeling to the Council's specification for the full length of each road frontage to the development site;
- (iii) construct reinforced concrete industrial crossings to the Council's specification from the kerb and channeling to the property alignment of the development site at approved locations where vehicular access to the development site is required;
- (iv) provide drainage work specified by the Council as necessary in connection with the works set out above including debris traps where drainage discharges directly or indirectly to the lake and/or waterway system;
- (v) provide reticulated sewerage and water supply adequate for the purpose of the development by connection to the Council's services in accordance with the requirements of the Council; and
- (vi) bear the cost of any alteration necessary to public utility mains, services or installations involved in the construction of the works referred to in this clause.

Any works within the road reserve must be undertaken in accordance with the North Lakes Town Centre design manual.

3.3.2 In respect of every development in this Sector the person who undertakes that development or uses the site must:

- (i) have all buildings designed by a registered architect and all landscaping designed by a qualified landscape architect;
- (ii) not impose a load on any public utility including the disposal of wastes, greater than that which is contemplated by the provisions of this Sector Plan; and
- (iii) not cause interference with the amenity of the area by the operation of machinery or electrical equipment, or from light, noise, vibration, smell, fumes, smoke, vapour, steam, soot, ash, grit, oil, dust, waste water, waste products, electrical interference or otherwise.

3.3.3 Requirements for Staging of Development

- (i) On completion of work in any stage, the remainder of the lot must be cleared of all rubble, debris and construction material and equipment and landscaped to the satisfaction of Council so as to be capable of being maintained.
- (ii) Each stage must form a coherent development and any future development sites must be provided with temporary landscaping, so the presentation of the lot to the street does not give a temporary or partially completed appearance.

3.4 DESIGN & SITING MEASURES

3.4.1 Building Setbacks

Building setbacks are to:

- (i) Be generally constructed up to the 3 metre landscape strip at the corner of Endeavor Boulevard and Discovery Drive. The length of building extending from this corner will be determined by architectural merit;
- (ii) be generally no less than seventeen (17) metres from the balance of the Discovery Drive frontage;
- (iii) be generally no less than three (3) metres along the balance of the Endeavour Boulevard frontage;
- (iv) be consistent with surrounding development to provide continuity in streetscape treatment; and
- (v) generally be developed up to any pedestrian thoroughfares (not being a road).

Refer to *Figure 4 - Sector Plan Map*, indicating setback distances for the Sector.

3.4.2 Site Coverage

Site coverage and associated plot ratio are not restricted, provided the following elements are appropriately and adequately addressed by the design of the development:

- (i) architectural articulation and an appropriate level of design;
- (ii) well-presented frontages that provide a recognisable entrance;
- (iii) development is in context with, and visually compatible with the appearance of any neighbouring buildings;
- (iv) pedestrian facilities including pedestrian shelters are provided at ground level; and
- (v) sufficient on-site car parking is provided.

3.4.3 Building Design

Buildings proposed in the Sector must:

- (i). be in context with and visually compatible with the height, scale and bulk of surrounding development and streetscape patterns;
- (ii). not exceed the height of buildings on adjacent sites by more than two (2) storeys for those portions of the buildings adjacent to and visible from the street or pedestrian areas;
- (iii). not exceed five (5) storeys in height; and
- (iv). where building heights exceed three (3) storeys in height, assessment of the need to setback the taller components of any building to create a podium must be undertaken. The assessment must address at least the impact of bulk and form on the streetscape and pedestrian environment in the immediate vicinity, as well as the impact of overshadowing.
- (v). allow sensitive environmental responses to slope, access and integration requirements;
- (vi). be designed with attractive rooflines that complement the overall building design, are compatible with surrounding commercial roof form and roof pitch and include varying elements for visual interest;
- (vii). include a combination of design elements to reduce building bulk, scale and mass, such as projections, recesses, openings and variations in light/shade and three dimensional form, banding in surfaces, external framing, entry structures, pergolas and subtle variations in parapet design;
- (viii). include large windows and/or balconies at upper levels which provide for viewing of external areas;
- (ix). create an attractive presentation to all road frontages and external pedestrian thoroughfares through the use of clearly articulated and well proportioned access doorways, landscaping and generally no more than two (2) rows of carparking and a centre manoeuvring aisle in front of the building;
- (x). complement the overall character of the Sector and the DCP area generally, whilst allowing corporate identity for tenants;
- (xi). incorporate materials and colours that are not highly reflective to avoid unreasonable glare nuisance to surrounding development; and
- (xii). for all non-residential buildings greater than 2500m² within this Sector, an Energy Efficiency and Water Efficiency Report must be submitted with the application for the Development Permit for Building Works. This report is to be certified by a suitably qualified person that the building generally complies with the energy efficiency guidelines in this Sector Plan.
- (xiii). Where openings are not provided to building facades located in proximity to the corner, maximise glazing at the ground floor level where appropriate;
- (xiv). orientate main public entrances to address the corner and provide well-lit pedestrian access and vehicular access to the street environment;
- (xv). present an attractive and functional façade to car parking areas and any pedestrian thoroughfares at the rear of development through use of horizontal and vertical variations and other design features that are consistent with the primary façade of the building;
- (xvi). ensure the Discovery Drive & Endeavour Boulevard façades of a building addresses the street;
- (xvii). be of an open-framed, light-weight appearance, possibly including layered façade treatment along Endeavour Boulevard and Discovery Drive; and

- (xviii). provide attractive facades and entries through the use of horizontal and vertical variations in the façade, and other design features.

3.4.3.1 Building Design Guidelines

Appendix B – Streetscape / Character Images provides photographs which are indicative of some desirable and undesirable characteristics. They are not intended to represent the final architectural or landscaping design of development within this Sector.

Building design within the Sector is encouraged to:

- (i) be of low to medium rise, with a minimum height of two (2) storeys;
- (ii) include innovative contemporary building design derivative from Queensland building traditions, and designed to suit the climate, light and local culture;
- (iii) be designed to be multi-purpose and easily adapted for future changes;
- (iv) ensure that buildings relate physically and functionally with each other in terms of their architecture, location of major entries and any changes of level across the Sector; and
- (v) ensure that the design and location of any buildings or structures within the Sector take account of:
 - (i) topography and the preference to minimise site earthworks;
 - (ii) drainage;
 - (iii) soil conditions;
 - (iv) services;
 - (v) orientation towards focal points;
 - (vi) aspect to maximise comfort and achieve energy savings;
 - (vii) microclimate considerations;
 - (viii) pedestrian movement patterns;
 - (ix) vehicular access to avoid or minimise conflict points with pedestrians;
 - (x) streetscape and landscape design;
 - (xi) adjoining developments;
 - (xii) minimising the effect of overshadowing on pedestrian areas;
 - (xiii) the functioning of Discovery Drive and Endeavour Boulevard;
 - (xiv) landscape screening of retaining walls and other elements with low visual amenity; and
 - (xv) views and vistas to prominent built and topographic features.

3.4.4.2 Material, Finish and Colour Guidelines

Building design within the Sector is encouraged to:

- (i) reflect a distinctive contemporary architectural style, with buildings sharing a palette of compatible finishes, colours and details that contribute to a strong sense of place;
- (ii) use materials and colours relating to those in the local environment, including the use of key character elements, for example, block stone work may be incorporated into the base of buildings to relate to the stone detailing within various public elements within North Lakes. Other key character elements may include the use of timber detailing, earthy tones, heavy plinth bases and

- feature species planting;
- (iii) include the integrated use of elements such as timber, glass and tin;
- (iv) include corrugated pre-finished and coloured metal sheets for major roofing materials. The application of these materials must minimise any reflective nuisance to surrounding development;
- (v) incorporate brighter colour accents for minor detail elements such as window and door frames, columns, handrails, ornamental features and signage details; and
- (vi) incorporate materials that:
 - (a) are robust, durable and resistant to vandalism;
 - (b) present a suitable finish to pedestrian areas;
 - (c) incorporate walls which present as solid and permanent elements;
 - (d) are of a high quality, clean and free of defects;
 - (e) are low maintenance,
 - (f) assist with thermal performance and energy efficiencies, where practicable.

3.4.4.3 Design for Microclimate and Energy Efficiency Guidelines

Building design within the Sector is encouraged to:

- (i) include the use of external shade structures, ventilated spaces, overhangs and screens to allow enjoyment of the outdoors while also providing relief from the sun, wind and rain;
- (ii) provide ventilated roof cavities by taking advantage of prevailing breezes;
- (iii) maximise the use of adequate and effective insulation materials in roof cavities and wall spaces of buildings in order to maximise comfort and minimise demands for energy required for air-conditioning;
- (vii) where possible, orientate buildings to minimize westerly sun exposure and maximize northerly exposure and solar access in the winter;
- (viii) articulate and shade external walls, and particularly the longer external walls, with eaves, over-hangs, sills or other treatments to reduce the exposure to direct sunlight, heat and glare, while windows in external walls should be recessed or shaded wherever possible to achieve energy savings;
- (ix) restrict the use of highly reflective materials on external walls or windows as a means of minimising energy requirements and excessive sunlight, glare and heat into adjoining developments;
- (x) incorporate the use of instantaneous gas, solar hot water heaters, heat pumps and/or solar energy devices;
- (xi) implement energy efficient management systems for the building;
- (xii) where possible, use building materials with high insulation values particularly for roofs and walls;
- (xiii) provide cross-ventilation and operable windows where buildings are able to catch prevailing breezes;
- (xiv) where possible, orientate buildings to minimize the potential impacts of cold westerly winds in winter and maximize cooling breezes from the south in summer; and

- (xv) design and landscape car parking areas to reduce the impacts of reflected heat and glare into adjacent buildings, and to reduce the effects of heat storage during summer months.

3.4.4.4 Water Efficiency Guidelines

Development within the Sector is encouraged to:

- (i) collect and store roofwater for toilet flushing and landscape use; and
- (ii) minimise water consumption through incorporation of flow restrictors, AAA rated water efficient taps and shower roses and dual flush (3/6 litre) cisterns.

3.4.5 **Safety and Crime Prevention**

The design and siting of any structures, landscaping, buildings and public spaces must:

- (i) avoid obscured corners and narrow or dead-end alleys;
- (ii) maximise the opportunity for casual surveillance of public spaces and car parking areas from surrounding buildings, roads and pedestrian areas;
- (iii) include lighting of public places; and
- (iv) include, for a use with a gross floor area of 2,500m² or more, an Environmental Design assessment such as Crime Prevention Through Environmental Design (CPTED) or similar crime prevention safety audit, which must be undertaken by applicants during the design phase and properly taken into account in the final design of the project. A copy of the assessment shall be provided to Council at the time of lodging each development application for a Material Change of Use. This assessment is to have due regard to the design and maintenance of buildings and external areas within the Sector, as well as the factors outlined in this sub-section.

3.4.6 **Lighting & Glare**

Lighting and Glare Management within the Sector must:

- (i) wherever possible, include architectural floodlighting of a building or space through the integration of the luminaries into the fabric of the building;
- (ii) ensure lighting systems are designed to prevent direct and/or reflected glare to surrounding areas. This applies particularly to disabling and uncomfortable glare to pedestrian and vehicular movement or at entrances, steps, stairs and pedestrian paths;
- (iii) ensure that where lighting is provided within landscaped areas, the choice and location of lighting allows for plant and tree growth and will not become obscured as the landscape matures;
- (iv) include safety lighting in open space and car parking areas that may be used at night-time;
- (v) ensure permanent strobe, laser, flashing, oscillating, moving or alternating lights are not permitted in locations within the Sector where they are likely to cause a nuisance;
- (vi) have regard to the efficiency of energy consumption in the design of lighting systems; and

- (vii) comply with the requirements of AS4282 – *Control of Obtrusive Effects of Outdoor Lighting*.

3.4.7 Plant & Equipment

The design and siting of plant and equipment must comply with the following requirements:

- (i) all air conditioning and ventilation plant and other equipment located on the roof or externally around the building are to be treated as an integral part of the building form and be suitably screened from view to match with surrounding materials;
- (ii) where lift motor rooms, plant rooms and the like are proposed, they are to be treated as an integral part of the building form in order to create a coherent roofscape;
- (iii) environmental management structures or control devices, such as gross pollutant traps, waste disposal bins, flues and the like are to be designed so as not to detract from the overall visual character of the town centre or the immediate area;
- (iv) contain design elements and buffer treatments to control any obtrusive effects where it is likely to adversely affect residential amenity, visual aesthetics, public safety and traffic safety;
- (v) if necessary, adopt effective air pollution mitigation measures to comply with the *Environmental Protection Act, Environmental Protection Policy (Air)* and other relevant legislation in relation to dust, smoke, fumes and gases, where necessary; and
- (vi) if necessary, adopt effective noise pollution mitigation measures to comply with the *Environmental Protection Act, Environmental Protection Policy (Noise)* and other relevant legislation, where necessary.

3.4.8 Telecommunications Equipment

Telecommunications equipment is to be:

- (i) generally co-located with other telecommunications equipment installed in the Sector;
- (ii) constructed in a form complementary to the façade and roofline of the building on which it is to be mounted; and
- (iii) where possible, coloured so as to blend in with the background of the building on which it is to be mounted.

3.4.9 Regrading

The earthworks approach for the Sector must:

- (i) ensure that changes of level at the site boundary allow non-discriminatory access to each allotment from the road frontage/s and to adjoining allotments, where possible;
- (ii) take into account the efficient management of earthworks;
- (iii) consider the visual impact of any batters and/or retaining walls along the Discovery Drive and Endeavour Boulevard frontages;
- (iv) be generally in accordance with surrounding approved Sector Plans;
- (v) achieve a high level of functional and visual integration between surrounding areas; and
- (vi) must be detailed & accompany any future application for material change in use.

3.5 LANDSCAPING / TOWNSCAPING

3.5.1 Landscape/Townscape Concept

The landscape framework for the Sector is represented by the design principles shown indicatively on *Figure 5 – Sector Landscape Plan*.

3.5.2 Character

The Discovery Drive streetscape is to be consistently framed with appropriate landscape and canopy trees to continue the species-themed "boulevard" entry to North Lakes. Streetscape treatment along this frontage includes a planted medium, generous footpaths, street trees, on-street parking and lighting. The "boulevard" is envisaged as a wide streetscape displaying a very open character.

Endeavour Boulevard is intended to be a wide streetscape with a very open character with no medium being constructed. Landscape planting along Endeavour Boulevard is be used to provide an accent to buildings in the Sector, rather than a screen to ensure the existing planting with the verges.

Street treatments and landscaping should clearly indicate the through-route nature of both Discovery Drive and Endeavour Boulevard and give views to the parking entrances of development. Landscaping shall promote safety and low speeds, but with due concern for maintaining driver's sightlines. Landscaping within private development sites must reinforce the landscaping within the street frontages. Landscaping is required to buffer and screen functional elements of uses such as car parking along these frontages to reduce their impacts upon the amenity and visual character of the Sector.

3.5.3 Requirements

Landscaping in the Sector must:

- (i) correspond with the design principles illustrated on *Figure 5 – Sector Landscape Plan*;
- (ii) generally achieve the landscape character described above and the landscape concept described in section 4.2 of the Precinct Plan;
- (iii) provide a minimum landscaped strip of three (3) metres along all street frontages of each lot within the Sector;
- (iv) be designed to complement and integrate with the landscaping and design character of adjoining Sectors and Precincts;
- (v) include canopy trees, planted by the Principal Developer, generally with a minimum clear trunk of 1.8 metres planted at informal intervals within the road reserve of Discovery Drive and Endeavour Boulevard. Street trees are intended to provide visual continuity to the street, reduce the road scale and provide shade to on-street car parking and adjacent pedestrian areas;
- (vi) reduce the appearance of an expanse of car parking areas by providing advanced shade trees at the rate of not less than one (1) tree per six (6) parking spaces and by providing low plantings along car parking aisles which do not impact on driver's sightlines;
- (vii) screen car parking areas from roads and other areas readily accessible to the public but occasional views of key elements of each proposed building may be provided;
- (viii) provide adequate landscaped areas so as to create a landscape setting and passive recreation space for development;
- (ix) allow for pedestrian linkages and landscape planting extending from entry points to development sites within the Sector to connect, where possible, through car park areas to the pedestrian pathway associated with internal driveways;
- (x) be employed to reduce reflected glare from building facades;
- (xi) not compromise pedestrian safety from vehicles accessing sites within the Sector or in surrounding development;
- (xii) be capable of efficient and effective maintenance;
- (xiii) generally frame entry areas to sites;
- (xiv) screen services such as electricity substations and transformers in a way that does not affect the streetscape;
- (xv) delineate between the pedestrian and vehicular environments, as well as to provide some relief from headlight glare and visual monotony; and
- (xvi) where retaining walls or batters are required, provide a landscape buffer located clear of these works to reduce the impact of the wall if visible from a street. Retaining walls and batters must be of a scale and materials that complement the surrounding built environment while responding to landform.

3.5.4 Fencing

The requirements for fencing within the Sector are set out below:

- (i) No fencing in proximity to road boundaries is permitted.
- (ii) if fencing is proposed to side and rear boundaries and is to be constructed of timber and the height of the fence must not exceed 1.8 metres . Other fencing materials may be considered as part of the material change in use application. Any fencing must be setback three (3) metres behind the alignment of the front façade on any building.

3.5.5 Plant Species Guidelines

Planting within the Sector is encouraged to incorporate:

- (i) plant species themes that are consistent and complementary to surrounding development. The species of trees, shrubs, and groundcovers used within the Sector should be selected from the Plant List included in **Appendix C - Plant List**. Plants of similar characteristics may be substituted for a species in the Plant List, if approved by Council. The selection of landscape material is to be cognisant of safety considerations by excluding thorny or poisonous plants that may be hazardous;
- (ii) the use of native species as the predominant plantings to visually reflect the original natural setting of the DCP area, as well as offer benefits of reduced maintenance and water requirements. Exotic and flowering species may be used occasionally as feature planting, to announce entries to the Sector, to provide shade trees in public outdoor spaces, or as accents of colour and texture within the framework of native plant material; and
- (iii) planting densities and heights appropriate for particular areas such as vehicle sales yards, retaining walls and the like are to be shown on a Landscape Plan submitted as part of the Material Change of Use application.

3.6 CARPARKING, SERVICE AREAS & LOADING DOCKS

3.6.1 Carparking

Car parking in the Sector must:

- (i) be limited to the generalised carparking areas illustrated on *Figure 4 – Sector Plan Map*;
- (ii) be in accordance with the Planning Scheme requirements current at the time of lodgement of the material change of use application, the DCP and the Council's Design Manual.
- (iii) as part of the total car parking requirements, provide not less than one (1) car park per fifty (50) spaces (or part thereof) for people with disabilities;
- (iv) be controlled to minimise its impact on the surrounding road network, any internal circulation and other development adjacent to the Sector;
- (v) provide safe pedestrian routes which focus on the connectivity between the site and adjacent development within the Town Centre Frame;
- (vi) ensure that pedestrian movement areas through car parks to a building are

clearly defined;

- (vii) where possible, provide opportunities for shared use of car parking between the Sector and adjoining Sector developments; and
- (viii) minimise the visual impact of any structured or basement car parking from the surrounding roads. Any structured parking is to be 'sleeved' behind development fronting Discovery Drive and Endeavour Boulevard. Surface car parking may include shade structures within selected areas of the car park.

Employee and customer bicycle parking spaces and the type of bicycle parking devices are to:

- (i) be generally in accordance with *Appendix D – Bicycle Parking Requirements*;
- (ii) include one (1) shower cubicle with ancillary change room per ten (10) bicycle spaces required by 3.6.1(ix) above. Facilities may be utilised by both males and females provided adequate privacy and accessibility is ensured for both sexes; and
- (iii) if the demand for the bicycle spaces is not consistent with the table contained in *Appendix D*, Council, on a case by case basis, may permit a reduction of the number of end of trip facilities.

3.6.2 Access

The requirements for access are set out below:

- (i) indicative vehicular ingress and egress points from Endeavour Boulevard and Discovery Drive are limited to the number of access points shown on the *Figure 4 – Sector Plan Map*. This access must limit turning movements to those shown on the sector plan map. However, the location of the access points may vary along the road provided other access restrictions noted on *Figure 4* are not compromised;
- (ii) restrictions to vehicular access from Discovery Drive and Endeavour Boulevard have been noted indicatively on *Figure 4* by the inclusion of the "No vehicular access permitted" designation;
- (iii) vehicular access points at these locations should ensure no queuing occurs across pedestrian areas or causes interruption to traffic on the surrounding roads;
- (iv) Discovery Drive and Endeavour Boulevard are to be developed as vehicular traffic priority streets;
- (v) provide convenient and safe pedestrian and cyclist access within or to development adjacent to the Sector and to public transport facilities. Such access is to be integrated with the path and street system;
- (vi) consideration must be given to the design and location of access points adjoining the Sector so as to minimise potential conflicts with car parking areas, pedestrian areas, paths and service areas within the Sector;
- (vii) vehicular access lanes into the Sector are to generally be a maximum width of ten (10) metres and include at least one footpath of a minimum two (2) metres width;
- (viii) adequate measures to achieve a high level of public safety on the shared access laneways / driveways is to be provided and, where appropriate, should include:

- (a) good visibility at all pedestrian crossings and establishing pedestrian priority, where appropriate;
 - (b) pavement treatments which achieve a very low traffic speed, while permitting easy and even-surfaces for desirable walking conditions for pedestrians;
 - (c) finishes that are in keeping with existing finishes within the road or the road verge;
 - (d) suitable barrier treatments at the entrance points;
 - (e) the provision of continuous pedestrian access between buildings, car parks and pedestrian areas; and
 - (f) the provision of site and building illumination within car park areas, pedestrian areas and along pedestrian paths during the hours of operation of any component of the development and, at other times, by the provision of security lighting.
- (ix) ensure that no reversing of vehicles, particularly service vehicles, shall occur in areas of high pedestrian activity;
 - (x) direct access for emergency vehicles is to be provided to every building within the Sector by the provision of a minimum 3.5 metre clear carriageway width;
 - (xi) pedestrian access points via car parking areas at the rear of any development should be clearly identified and designed to maximise safety and convenience; and
 - (xii) access for all people including people with a disability is to be achieved by ensuring that development complies with Council provisions relating to access for people with disabilities.

3.6.3 Servicing Requirements

Development within the Sector must provide:

- (i) if required, loading zone parking which is to be accessed from the internal vehicle circulation areas;
- (ii) storage for refuse and recyclable materials which are suitably screened from circulation areas;
- (iii) service connection points incorporated into hard and soft landscaping areas;
- (iv) service connections that do not protrude from paving or driveways or cause any hazard for pedestrians or vehicles; and
- (v) where appropriate, provide landscaping and other screening devices to undesirable views of service areas, loading bays, refuse areas and plant and machinery, within the Sector and in adjacent Sectors.

3.7 SIGNAGE

Signage in the Sector must:

- (i) with respect to signage that identifies development within the Sector and associated development, be generally integrated with any frontage walls, entry statements or entry structures, if provided. This signage may be located along the frontage of Discovery Drive and Endeavour Boulevard;

- (ii) be limited to signage integrated into any proposed buildings;
- (iii) where appropriate, include directional signage for visitors which may include logos/names of the use;
- (iv) consist of high quality materials, form, scale and proportions and be coordinated to the built form throughout the Sector, while providing sufficient flexibility for corporate identification and marketing purposes;
- (v) ensure that lighting of any signage will not cause a nuisance to drivers or pedestrians;
- (vi) be visible, legible and not result in a cluttered or discordant streetscape;
- (vii) provide limited use of highly reflective finishes;
- (viii) incorporate professional and coordinated graphics;
- (ix) not permit bunting, streamers, sandwich boards and other low-quality, temporary, or opportunistic signs; and
- (x) ensure that any support structure or cabling to illuminate signs will not be visible.

3.7.1 Signage Guidelines

- (i) Signage guidelines are included at *Appendix E - Town Centre Signage Guidelines*. The Signage Guidelines are to be taken into consideration, along with other relevant issues, when considering matters regarding signs and architectural graphics of all kinds. They are not to be interpreted as giving rights to any number or types of signage.
- (ii) A Coordinated Signage Plan is to be submitted with any development application for Material Change of Use within this Sector. The Coordinated Signage Plan must distinguish between artworks/murals, on-site business advertising, animated signage, and "third party" advertising in terms of sign dimension, location, illumination, and animation on the face of the sign.

4.0 Environmental Management

There is no Environmental Management Plan having application to this Sector.

Management systems for land within the Sector must be implemented to ensure that the Objectives and Performance Indicators referred in the following sections of the Precinct Plan continue to be met throughout the life of the development and the use of the Sector:

- (i) Section 5.1 – Environmental Management Objectives;
- (ii) Section 5.2 – Stormwater Management Objectives; and
- (iii) Section 5.3 – Earthworks Management Objectives.

5.0 Subdivision Requirements

As shown in *Appendix F – Proposed Metes and Bounds Description* the total area of the Sector is 4000m².

This sector will include only one lot as shown on *Figure 6 - Indicative Plan of Subdivision*. No further subdivisions are permitted

6.0 Infrastructure

6.1 INFRASTRUCTURE TO BE PROVIDED

The infrastructure required to be provided by the Principal Developer to serve the Sector includes internal and external infrastructure provisions in accordance with the Rezoning Conditions, the Mango Hill Infrastructure Agreement 1999 (MHIA) and agreements made with the State Government in accordance with the DCP. These obligations are summarised as follows:

6.1.1 Roads

All roadworks required by the MHIA and where applicable, the Mango Hill Agreement – Main Roads (MHIA – MR), associated with this sector have been completed. (refer to *Figure 7 – Road Layout*).

- (i) (refer to *Figure 7 – Road Layout*)

6.1.2 Water Supply

- (i) Reticulation systems along all internal roads to service all properties in the Precinct;
- (ii) Those sections of the mains shown on *Figure 8 – Water Supply Headworks*, necessary to service the anticipated demand in the Sector; and
- (iii) Make contribution towards water headworks and bulk water supply in accordance with the MHIA.

6.1.3 Sewerage

- (i) Trunk gravity main from the existing Council sewerage infrastructure to connect with each lot in the Sector as shown on *Figure 9 – Sewerage Headworks*; and
- (ii) Make contribution towards sewerage headworks supply in accordance with the MHIA.

6.1.4 Park

The requirements for park provision throughout the DCP area are provided for in the MHIA. No area within this sector will be dedicated as park.

6.1.5 Stormwater

- (i) The Principal Developer must comply with the provisions of the Stormwater Management Plans for Saltwater Creek and Tributary C as approved by Council and construct stormwater management works so far as they relate to this Sector.
- (ii) Stormwater management works so far as they relate to the Sector are to be provided in accordance with the MHIA, Council's Design Manual, the Stormwater Management Plan for Tributary C, including the construction of all drainage and landscaping works in Tributary C and the Stormwater Management Plan for Saltwater Creek.
- (iii) In addition, the Principal Developer is to construct stormwater drainage systems and stormwater management systems as required by the MHIA and the Environmental Protection (Water) Policy.

6.1.6 Electricity Supply, Lighting and Communications

- (i) Allow for underground electricity distribution to all properties within the Sector, by Energex or another appropriate supplier of electricity.
- (ii) Arrange for the provision of underground conduits along all road verges within the Sector and adjacent roads to meet the anticipated demands of the DCP area.
- (iii) Provide underground electricity to all properties within the Sector through Energex or another appropriate supplier of electricity and to Council standards.
- (iv) Provide public lighting to all roads, streets and if relevant, parks and other public areas and facilities within the Sector and along Discovery Drive and its intersection with Endeavour Boulevard, constructed to relevant Australian Standards and in accordance with the requirements of Energex or alternative supplier of electricity and Council standards.
- (v) Provide high voltage electricity services to the Sector through Energex or another supplier of electricity and to Council standards.
- (vi) Provide all electricity services and distribution systems as underground services, including conduits along all road verges within the Sector and adjacent roads to meet the anticipated demand of the DCP area.

6.2 INFRASTRUCTURE AFFECTED OR REQUIRED BY DEVELOPMENT OF THE SECTOR

- (i) The development of the Sector may place demands on the following infrastructure:
 - (a) Roads external to the DCP area and the Sector;
 - (b) Water supply infrastructure;
 - (c) Sewerage infrastructure;
 - (d) Stormwater infrastructure;
 - (e) Parks;
 - (f) Community facilities;

- (g) Electricity and gas supply;
 - (h) Communications systems; and
 - (i) State Government Infrastructure.
- (ii) The infrastructure described in clause 6.1 above, together with the obligations of the Principal Developer under infrastructure agreements will mitigate the adverse affects on the above infrastructure.

6.3 HOW THE REQUIRED INFRASTRUCTURE RELATES TO THE INFRASTRUCTURE AGREEMENTS

The infrastructure agreements describe the infrastructure that must be provided by the Principal Developer as part of its obligations to provide infrastructure, as envisaged by Chapter 12 of the DCP. The works described in clause 6.1 of this document are the Principal Developer's obligations under the rezoning conditions and the infrastructure agreements.

7.0 Detailed Infrastructure Program

7.1 ESTIMATED DATE FOR PROVISION OF INFRASTRUCTURE

The Principal Developer is to provide the infrastructure referred to in clause 6.1 of this document at times to satisfy the requirements of the MHIA. The majority of the infrastructure has been completed during 2005.

7.2 INTENDED PROVIDER

The Principal Developer is to provide the infrastructure referred to in Section 6.1 at times to satisfy the requirements of the Rezoning Conditions and the MHIA which provides for the infrastructure to be constructed to meet the rate of development in the Sector.

7.3 OTHER WORKS DEPENDENT ON INFRASTRUCTURE PROVISION

No other works depend on the provision of the infrastructure specified in Section 6.1.

Council is to use its best endeavours, including its powers of resumption if lawful, to obtain all necessary rights to permit the construction of water and sewerage infrastructure if such infrastructure is constructed on land external to the DCP area over which Council does not have such rights.

7.4 OTHER RELEVANT INFORMATION

7.4.1 Estimated Water and Sewerage Demands

As required by the MHIA, the Principal Developer states as follows:

- (i) For the purpose of assessing water supply capacity, the estimated number of equivalent Tenements for this Sector is 6 ET;

- (ii) For the purpose of assessing sewerage capacity, the estimated number of Equivalent Persons for this Sector is 12 EP; and
- (iii) if a future alternative use of the Sector imposes a greater demand on minimum water supply and sewerage infrastructure than assigned in an approved development site within this Sector, Council is to approve the alternative use provided the developer demonstrates that:
 - (a) to do so will not adversely impact on minimum water supply and sewerage infrastructure standards within the DCP area and elsewhere if considered appropriate by the Council's engineer having taken into consideration development approved in the DCP area at the time of an application and future development in the DCP area as provided for by the DCP;
 - (b) the principal developer has confirmed, in writing, that the increase demand will not prevent servicing the total number of ETs or EPs provided in the MHIA; and

In the event the developer satisfies Council of the requirements in (a) and (b) above, the Council will require the payment of headworks charges for ETs and EPs not already paid in respect of the proposed development.

APPENDIX A

FINAL SPECIFICATION

OF LAND USE

FOR THIS SECTOR

**FINAL SPECIFICATION OF LAND USE
(TOWN CENTRE FRAME 'C' PRECINCT)
FOR TOWN CENTRE FRAME 'C' SECTOR SIX**

| <p style="text-align: center;">Purposes for which premises may be erected or used without the consent of Council (Permitted Development)</p> <p style="text-align: center;">COLUMN A</p> | <p style="text-align: center;">Purposes for which premises may be erected or used without the consent of Council subject to conditions (Permitted Development subject to conditions)</p> <p style="text-align: center;">COLUMN B</p> | <p style="text-align: center;">Purposes for which premises may be erected or used only with the consent of Council (Permissible Development)</p> <p style="text-align: center;">COLUMN C</p> | <p style="text-align: center;">Purposes for which premises may not be erected or used (Prohibited Development)</p> <p style="text-align: center;">COLUMN D</p> |
|--|--|--|--|
| <p style="text-align: center;">Self Assessable</p> | <p style="text-align: center;">Code Assessable</p> | <p style="text-align: center;">Impact Assessable Development</p> | |
| <p>Caretaker's residence Local utilities Park</p> | <p>Special use (Police, Station)</p> | <p>Any other Use not listed in Column A, B or D</p> | <p>Adult product shop Agriculture Air strip Animal husbandry Aquaculture Bulk garden supplies Camping grounds Caravan park Cattery Cemetery Concrete batching plant Contractor's depot Correctional institution Crematorium Dairy Extractive industry Fuel depot General industry Hazardous industry Heavy vehicle parking Heavy vehicle sales Host farm Junk yard Kennels Lot feeding Motor sport or shooting Piggery Poultry farm Rural industry Shopping centre >1,500m² GLA Showground Simulated conflict Stable Stock sales yard Transport terminal Transportable home village Turf farming</p> |

APPENDIX B

STREETSCAPE / CHARACTER IMAGES

**NORTH LAKES DEVELOPMENT
STREETSCAPE / CHARACTER IMAGES
TOWN CENTRE FRAME “C” SECTOR SIX (SECTOR PLAN 019-6000)**



Image 1 – Acceptable
Innovative contemporary building design. Includes integrated use of elements such as block work, glass and tin and horizontal and vertical variations in the façade for visual interest.



Image 2 – Acceptable Clearly identified and defined entry which allows for pedestrian linkages from external pathways and car parking areas. Glazing to be provided along frontage



Image 3 – Acceptable
Landscaping along carparking aisles and between carparking spaces reduces the appearance of an expanse of carparking areas.



Image 4 – Acceptable - Windows overlooking car park which allows casual surveillance of car parking areas.
Varied roofline. Building provides a variety of architectural design elements that relieves building scale and bulk such as eaves and recesses
Unacceptable - The main entrances are not orientated to address the street frontage. Lack of landscaping in car parking area.



Image 5 - Acceptable
Directional signage can include business logo.
Unacceptable
Signage should be integrated with landscaping frontage treatment.

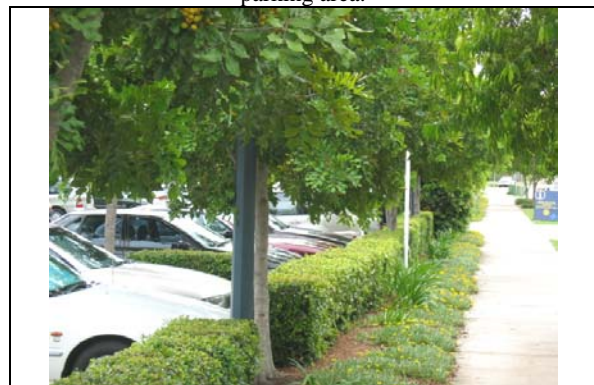


Image 6 – Acceptable
Convenient and safe pedestrian and cyclist access within or to development adjacent to the Sector.
Such access is to be integrated with the path, car park and street system.

**NORTH LAKES DEVELOPMENT
STREETSCAPE / CHARACTER IMAGES
TOWN CENTRE FRAME “C” SECTOR SIX (SECTOR PLAN 019-6000)**



Image 7 – Acceptable
Surface car parking may include shade structures within selected areas of the car park.

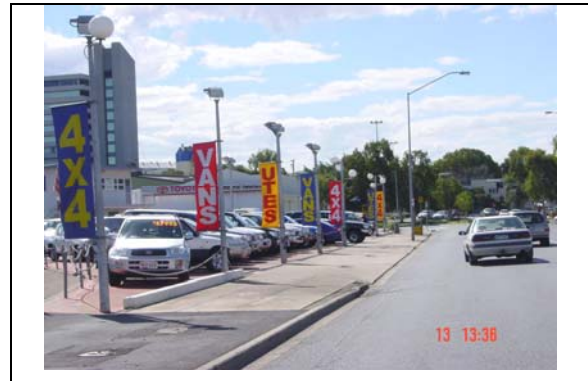


Image 8 – Unacceptable
Multiple signs and repetition.

Unacceptable
Ill-defined access and lack of landscaping.



Image 9 – Acceptable
Corner sites should define the street environment by incorporating a corner feature treatment at the Discovery Drive / Endeavour Boulevard intersection. Treatments will include minimal frontage setback distances, an outward orientated building design to both road frontages awnings and display windows, where appropriate.



Image 10 - Unacceptable
Inappropriate streetscape treatment due to lack of landscaping, signage clutter and exposed car parking.



Image 11 – Acceptable
Effective use of open framed design, building articulation and a combination of building materials and glazing to create variation and visual interest in building facades. Appropriate siting of pole signage integrated within the built form and set adjacent to the front landscaping treatment avoiding visual clutter.

APPENDIX C

PLANT LIST

**Appendix C: Indicative Plant Schedule -
Town Centre Frame "C" – Corner Discovery Drive /
Endeavour Boulevard – Sector Six**

| Botanical Name | Common Name |
|--|--------------------------|
| Trees & Palms | |
| <i>Acmena smithii</i> | Lilly Pilly |
| <i>Agathis robusta</i> | Kauri Pine |
| <i>Allocasuarina littoralis</i> | Black She Oak |
| <i>Allocasuarina torulosa</i> | Forest She Oak |
| <i>Araucaria cunninghamia</i> | Hoop Pine |
| <i>Archontophoenix cunninghamia</i> | Pickabean Palm |
| <i>Backhousia citriodora</i> | Lemon Scented Myrtle |
| <i>Backhousia myrtifolia</i> | Carrol |
| <i>Banksia integrifolia</i> | Coast Banksia |
| <i>Barklya syringifolia</i> | Crown of Gold Tree |
| <i>Brachychiton acerifoliun</i> | Flame Tree |
| <i>Brachychiton rupestre</i> | Bottle Tree |
| <i>Buckinghamia celsissima</i> | Ivory Curl Flower |
| <i>Callistemon salignus</i> | Pink Tips |
| <i>Callistemon viminalis</i> | Weeping Bottlebrush |
| <i>Callitris columellaris</i> | Bribie Island Pine |
| <i>Cassia fistula</i> | Golden Shower Tree |
| <i>Cassia javanica/Cassia siamea</i> | Cassia |
| <i>Castanospermum australe</i> | Black Bean |
| <i>Casuarina cunningghiana</i> | River She Oak |
| <i>Casuarina glauca</i> | Swamp She Oak |
| <i>Cupaniopsis anacardioides</i> | Tuckeroo |
| <i>Elaeocarpus eumundii</i> | |
| <i>Eucalyptus citriodora</i> | Lemon Scented Gum |
| <i>Eucalyptus ptychocarpa</i> | Swamp Bloodwood |
| <i>Eucalyptus curtisii</i> | Plunkett Mallee |
| <i>Euodia elleryana</i> | Pink Euodia |
| <i>Ficus Hillii</i> | Hill's Fig |
| <i>Ficus macrophylla</i> | Moreton Bay Fig |
| <i>Ficus rubignosa</i> | Port Jackson Fig |
| <i>Flindersia australis</i> | Crows Ash |
| <i>Flindersia pimenteliana</i> | Flindersia |
| <i>Flindersia schottiana</i> | Bumpy Ash |
| <i>Grevillea robusta</i> | Silky Oak |
| <i>Harpullia pendula</i> | Tulipwood |
| <i>Hymenosporum flavum</i> | Native Frangipanii |
| <i>Jacaranda mimosifolia</i> | Jacaranda |
| <i>Lagerstroemia indica</i> | Crepe Myrtle |
| <i>Livistona australis</i> | Livistona |
| <i>Livistona decipiens</i> | Weeping Cabbage Palm |
| <i>Livistona nitida</i> | Livistona |
| <i>Lophostemon confertus</i> | Brush Box |
| <i>Lophostemon suaveolens</i> | Swamp Box |
| <i>Melaleuca linariifolia</i> | Snow in Summer |
| <i>Melaleuca leucadendron</i> | Small Leaved Paperbark |
| <i>Melaleuca quinquenervia</i> | Broadleaved Paperbark |
| <i>Metrosideros queenslandicus</i> | Queensland Golden Myrtle |
| <i>Oreocallis sp. nova (wickhamii)</i> | Tree Waratah |
| <i>Peltophorum pterocarpus</i> | Yellow poinciana |
| <i>Phoenix canariensis</i> | Canary Island Palm |

**Appendix C: Indicative Plant Schedule -
Town Centre Frame "C" – Corner Discovery Drive /
Endeavour Boulevard – Sector Six**

| Botanical Name | Common Name |
|----------------------------------|--------------------------|
| Trees & Palms | |
| Podocarpus elatus | Brown Pine |
| Roystonea regia | Cuban Royal Palm |
| Syzygium australe | Scrub Cherry |
| Syzygium franchisee | Giant Water Gum |
| Syzygium jambos | Rose Apple |
| Syzygium leuhmanii | Small Leaved Lilly Pilly |
| Syzygium paniculatum | Dwarf Magenta Cherry |
| Tristanopsis laurina | Water Gum |
| Waterhousia floribunda | Weeping Myrtle |
| Xanthostemon chrysanthus | Golden Penda |
| Shrubs | |
| Baeckea sp. Mt Toza | Dwarf Baeckea |
| Baeckea virgata | Twiggy Myrtle |
| Baeckea virgata dwarf | Dwarf Baeckea |
| Banksia Birthday Candles | Dwarf Banksia |
| Banksia ericifolia | Heath Banksia |
| Banksia integrifolia | Coastal Banksia |
| Banksia robur | Swamp Banksia |
| Banksia spinulosa var collina | Hairpin Banksia |
| Callistemon Dawson River | Dawson River |
| Callistemon Little John | Little John |
| Callistemon Ned Kelly | Ned Kelly |
| Callistemon pachyphyllus | Bottlebrush |
| Cyathea australis | Rough Tree Fern |
| Gardenia Florida | Double Gardenia |
| Grevillea "Coconut Ice" | Coconut Ice |
| Grevillea "Majestic" | Majestic |
| Grevillea "Robyn Gordon" | Grevillea |
| Grevillea "Superb" | Superb |
| Grevillea banksii | Red Silky Oak |
| Grevillea Honey Gem | Honey Gem |
| Grevillea Ned Kelly | Ned Kelly |
| Hibiscus rosa sinensis | Hibiscus |
| Hovea acutifolia | Pointed Leaf Hovea |
| Leptospermum flavescens | Tantoon Tea Tree |
| Leptospermum petersonii | Lemon Scented Tea Tree |
| Leptospermum Pink Cascade | Pink Cascade |
| Melaleuca linariifolia Snowflake | Dwarf Tea Tree |
| Murraya paniculata | Orange Jessamine |
| Pittosporum revolutum | Brisbane Laurel |
| Pittosporum undulatum | Mock Orange |
| Syzygium Blaze | Dwarf Lilly Pilly |
| Syzygium Elite | Compact Lilly Pilly |
| Syzygium Tiny Trev | Dwarf Lilly Pilly |
| Tibouchina jules | Tibouchina |
| Westringea fruticosa | Wynyabbie Gem |

**Appendix C: Indicative Plant Schedule -
Town Centre Frame "C" – Corner Discovery Drive /
Endeavour Boulevard – Sector Six**

| Botanical Name | Common Name |
|----------------------------------|-------------------------|
| Groundcovers | |
| Agapanthus africanus | Lily of the Nile |
| Agapanthus orientalis | Lily of the Nile |
| Agapanthus Peter Pan | Dwarf Agapanthus |
| Anigozanthos hybrids | Kangaroo Paws |
| Blechnum cartilagineum | Fern |
| Cissus rhombifolium | Grape Ivy |
| Cissus Ellen Danica | Grape Ivy |
| Crinum pendunculatum | River Lily |
| Dianella revoluta | Flax Lily |
| Dietes bicolor | Japanese Iris |
| Dietes grandiflora | Japanese Iris |
| Evolvulus pilosus | Blue Sapphire |
| Gardenia radicans | Dwarf Gardenia |
| Grevillea Bronze Rambler | Bronze Rambler |
| Grevillea Royal Mantle | Prostrate Grevillea |
| Hardenbergia violacea | Purple Coral Pea |
| Hardenbergia violacea Bushy Blue | Bushy Blue |
| Helichrysum ramosissimum | Yellow Buttons |
| Hemerocallis species | Day Lily |
| Hibbertia dentata | Toothed Guinea Flower |
| Hibbertia scandens | Snake Vine |
| Liriope "Evergreen Giant" | Liriope |
| Lomandra hystrix | Creek Mat rush |
| Lomandra longifolia | Mat Rush |
| Lomandra multiflora | Long Leaved Mat Rush |
| Myoporum ellipticum | Creeping Boobialla |
| Myoporum parvifolium | Myoporum |
| Pittosporum Miss Muffet | Dwarf Pittosporum |
| Pittosporum tobira | Miss Muffet |
| Viola hederacae | Native Violet |
| Zierra Carpet Star | Carpet Star |
| Grasses | |
| Cynodon dactylon | Green Couch |
| Danthonia induta | Wallaby Grass |
| Digitaria didactyla | Blue Couch |
| Greenlees Park | Hybrid Couch |
| Poa australis | Native Poa |
| Vines | |
| Jasminum polyanthum | Jasmine |
| Pandorea pandorana | Wonga Wonga Vine |
| Pandorea jasminoides | Bower of Beauty |
| Trachelospermum jasminoides | Variegated Star Jasmine |
| Trachelospermum jasminoides | Star Jasmine |

APPENDIX D

Bicycle Parking Requirements

**BICYCLE PARKING REQUIREMENTS
(TOWN CENTRE FRAME 'C' PRECINCT)
FOR TOWN CENTRE FRAME 'C' SECTOR SIX**

| Land use | Employee Bicycle Parking spaces | Class | Visitor/Shopper Bicycle Parking spaces | Class |
|--|-----------------------------------|-------|---|-------|
| Special use (Police, Fire, Ambulance Station) | 1 space per 750m ² GFA | 2 | 1 space per 750m ² GFA over 1000m ² GFA | 3 |
| Notes:- | | | | |
| <ol style="list-style-type: none"> 1. GFA – Gross floor area, as defined in the DCP; 2. The provision of bicycle spaces recommended in the table may be staged initially depending on the demand for use, however space should be set aside to allow 100% provision in the event that the full demand for bicycle parking is realised. | | | | |

Types of Parking Devices

| Class | Security Level | Description | Main User Type |
|-------|----------------|--|---|
| 1 | High | Fully enclosed individual lockers | Bike and ride commuters at railway and bus stations. |
| 2 | Medium | Located compounds fitted with Class 3 facilities. Communal access using duplicate keys or electronic swipe cards | Regular employees, students, regular bike and ride commuters. |
| 3 | Low | Facilities to which the bicycle frame and wheels can be locked | Shoppers, visitors to public offices, places of employment where there is security supervision of the parking facilities. |

APPENDIX E

TOWN CENTRE FRAME SIGNAGE GUIDELINES



NORTH LAKES

NORTH LAKES TOWN CENTRE FRAME SIGNAGE GUIDELINES

1.0 OBJECTIVES

The objectives of the signage standards for North Lakes are:

- (i) To implement design standards consistent with the existing and future character of North Lakes
- (ii) To ensure that signs and advertisements complement the attractiveness, safety, legibility and amenity of the North Lakes environment, both day and night
- (iii) To support the role of signs and advertising as an important factor in the marketing of North Lakes and in identifying the commercial character in areas of the development.

2.0 DEFINITIONS

Animated Signage:

An animated sign is an advertisement with a changing display, such as flashing or chasing bulbs, or any other non-static illuminated displays.

Third Party Advertising:

A "third party" advertising sign is an advertisement for a business not conducted on the land on which the sign is located, or a commodity not available on that land, and includes an advertisement for a particular brand of product sold or distributed from the premises. However, an advertising sign which incorporates the North Lakes logo as an integral element of the signage, or a sign which includes only a generic reference to the type of product available on the land is not a "third party" advertising sign in terms of the inclusion of the North Lakes logo or the generic product reference.

On- Site Business Advertising:

An on-site business advertising sign is an advertising sign which is limited in its content to the name of a business premises and the name and services offered by the occupants of the business premises. An on-site business advertising sign may also incorporate the North Lakes logo as an integral element of the signage.

Artworks/Murals:

Artwork and murals are architectural graphics and other artworks which do not contain any implied or direct reference to a business undertaking or service or commodity available from a business undertaking. However, artworks and murals may incorporate the North Lakes logo as a supporting or an ancillary element.

3.0 SIGNAGE GUIDELINES

Except in the case of road signs, the following guidelines will be applied to all advertising signage erected in the North Lakes Town Centre Core. The following guidelines are to be read in association with the guidelines contained in Section 7.9.1 of this Sector Plan.

These guidelines are intended to apply for individual signs, but where they form part of a coordinated signage plan, they can be varied.

3.1. Scale and Location of Signs on Buildings

The scale of the sign shall be compatible with the building and building elements on which it is affixed and to which it is in proximity, as well as nearby buildings, streets and other existing signs. Consideration shall be given to the sign's relationship to the overall appearance of the development as well as surrounding development.

The number and area of signs, if specified, are intended to be maximum standards.

3.2. Principal Developer Signs

Within road reservations and on land in ownership of the Council or the principal developer, signage content is limited to the message requirements of the principal developer and traffic control. Generally content of signs within these areas will be restricted to directional information for identifying locations, buildings, services and events. Commercial business names or logos will generally not be permitted except for sponsorships on temporary event signs.

3.3. Traffic Safety

A sign must not obstruct pedestrians' views of traffic or vehicle driver's views of pedestrians, other traffic or the road ahead. A sign must not create possible confusion for drivers at critical locations such as intersections, traffic signals, or merging and weaving situations eg. red and green lit signage near traffic intersections.

3.4. Installation Fixings

No support, fixing, suspension or other systems required for the installation of a sign shall be exposed, unless designed as an integral feature of the sign. Conduits, wiring, switches etc shall be discreetly placed out of general view.

3.5. Animated Signs

Animated signs, where parts or all of the sign components move, may be acceptable in non-residential environments where no significant adverse impacts are likely to adjacent or nearby sensitive land uses.

3.6. Clutter

The visual amenity of the local area and the effectiveness of the message on the sign will be enhanced by reducing signage clutter. Proposed signs shall be assessed in the context of the number, type, size and location of existing signs on the site and surrounds.

3.7. Illumination

The luminance of an externally illuminated advertisement in the Town Centre Core (measured in candelas per square metre) is not to exceed 500 cd/m².

The luminance level of an advertisement may exceed this level where it can be shown that the increase in luminance level is unlikely to contribute to a traffic hazard or cause an inappropriate loss of amenity.

The external illumination of signs is to be carried out in such a way as to minimise the spill effects beyond the target sign. An illuminated sign must be designed to make the best possible use of the energy efficient equipment and light sources available.

At street level sign illumination is to be consistent with the general level of lighting so as to eliminate shadows and promote the safety of adjoining public areas.

The intensity of lighting and hours of illumination must not unreasonably impact on any residential properties or traffic operations.

3.8. Environmental Controls

A sign must not be nailed or similarly fixed to a tree. Every sign shall be maintained and kept in good repair.

3.9. Performance Controls

Unless otherwise approved under the coordinated signage plan, a proposed sign must meet the performance criteria outlined in the following section. The acceptable standards associated with each type of sign are provided as examples and should not be seen as precluding other solutions. However, where alternative solutions are proposed, the onus will be on the proponent to demonstrate that the relevant performance criteria are met.

SIGNS PERFORMANCE CRITERIA

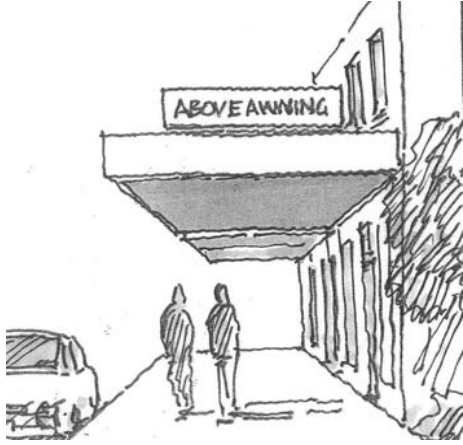

Signs shall:

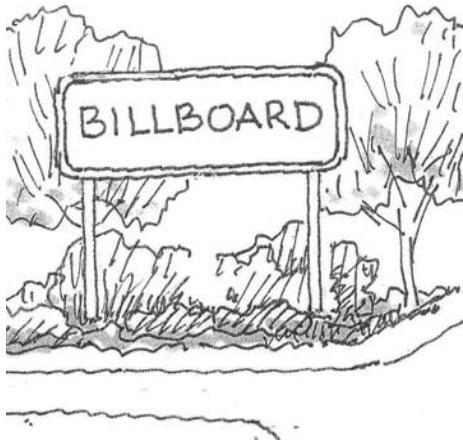
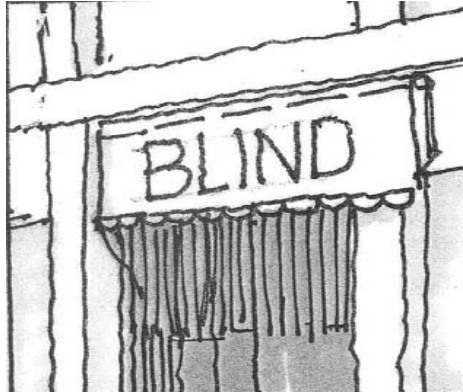
- (i) not create a hazard to traffic or pedestrians**
- (ii) be of character and design standard consistent with the objectives and controls for this sector plan**
- (iii) complement the streetscape and amenity of the locality by virtue of their size, location, illumination, utilisation of complementary shapes, forms, colours, durable quality materials and design concepts**
- (iv) if affixed to a building, complement the architectural style of the building by virtue of their size, location, illumination, utilisation of complementary shapes, forms, colours, durable quality materials and design concepts; and**
- (v) not unnecessarily repeat or duplicate similar signs.**

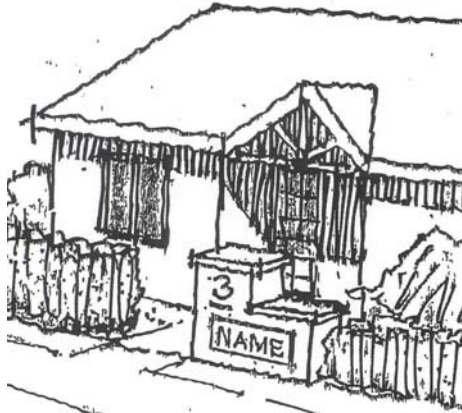

4.0 TYPES OF SIGNS


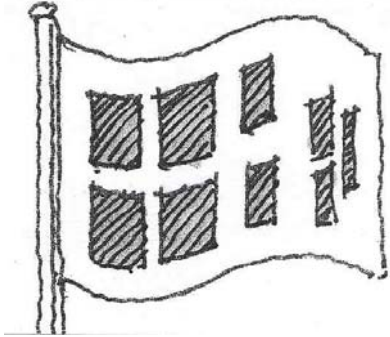
The following schedule sets out maximum criteria for various types of signs. Such signs may be permitted subject to the overall performance standards being met.


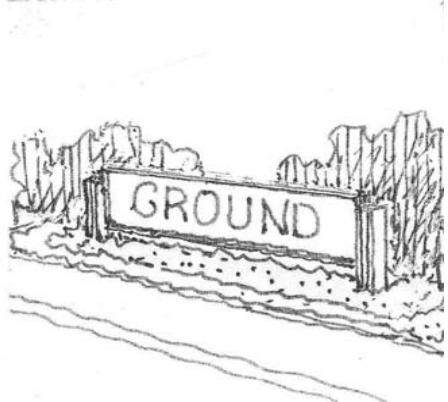
- (i) Above Awning Sign
- (ii) Awning / Fascia Sign
- (iii) Billboard Sign
- (iv) Blind Sign
- (v) Business Plate
- (vi) Canopy Sign
- (vii) Created Awning Sign
- (viii) Flag Pole Sign
- (ix) Footway Sign
- (x) Ground Sign
- (xi) Hamper Sign
- (xii) Highrise Building Sign
- (xiii) Lantern Sign
- (xiv) Pole Sign
- (xv) Projecting Flag Sign
- (xvi) Projecting Sign
- (xvii) Stallboard Sign
- (xviii) Under Awning Sign
- (xix) Vertical Banner Building Sign
- (xx) Vertical Banner Freestanding Sign
- (xxi) Wall Sign
- (xxii) Window Sign



| TYPE OF SIGN | EXAMPLE OF TYPE OF SIGN | ACCEPTABLE STANDARD FOR SPECIFIC SIGN STYLE | |
|---|---|--|--|
| <p>ABOVE AWNING SIGN An Above Awning Sign is an advertisement above an awning, verandah roof or the like.</p> |  | <p>Maximum size</p> <p>Maximum height above awning</p> <p>Extent</p> <p>Other requirements</p> | <p>Length - 2.7 metres</p> <p>Height - 0.6 metres</p> <p>Width - 0.3 metres</p> <p>1.0 metre</p> <p>Not to project beyond the edges of the awning</p> <p>No unsightly supports or rear view of sign.</p> <p>Any unsightly supports required for structural reasons are to be set back behind edges of sign</p> |
| <p>AWNING/FASCIA SIGN An Awning/Fascia Sign is an advertisement painted or otherwise affixed to the fascia of a building, an awning, verandah or return end of an awning.</p> |  | <p>Maximum extent</p> <p>Maximum height</p> <p>Maximum thickness</p> | <p>Not projecting above or below the fascia</p> <p>0.6 metre</p> <p>0.1 metre out from fascia</p> |



| TYPE OF SIGN | EXAMPLE OF TYPE OF SIGN | ACCEPTABLE STANDARD FOR SPECIFIC SIGN STYLE | |
|--|---|--|---|
| <p>BILLBOARD SIGN A Billboard Sign is a freestanding display surface, the width of which is greater than the height and which may be positioned on the ground or mounted on one or more vertical supports.</p> |  | <p>Maximum area</p> <p>Maximum height above ground to top of sign</p> <p>Setting</p> <p>Minimum setback from side boundary</p> <p>Front setback</p> <p>Maximum</p> | <p>20 square metres per side for a maximum of 2 sides</p> <p>6.5 metres or the height of a building in close proximity whichever is the lesser</p> <p>As a free standing structure within a landscaped environment and so as not to expose an unsightly back view of the sign to a road or other public places</p> <p>3.0 metres</p> <p>Not to project beyond front property alignment</p> <p>Generally no billboard shall be erected on a site along which are located Pylon or Large Pylon signs unless the frontage exceeds 100m in which case a separation of 60m must be achieved.</p> |
| <p>BLIND SIGN A Blind Sign is an advertisement painted on or otherwise affixed to solid or flexible material suspended from the edge of an awning, verandah or wall.</p> |  | <p>Minimum clearance between the lower most point of the sign and the footway</p> <p>Maximum number</p> | <p>2.4 metres</p> <p>1 per tenancy frontage</p> |

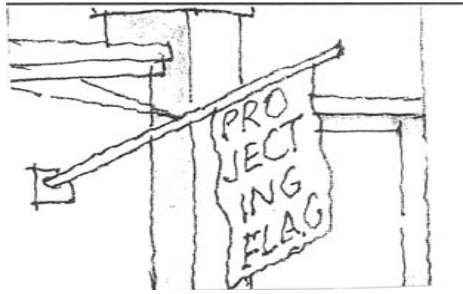
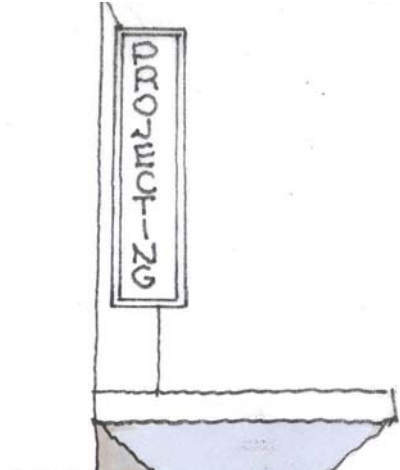
| TYPE OF SIGN | EXAMPLE OF TYPE OF SIGN | ACCEPTABLE STANDARD FOR SPECIFIC SIGN STYLE | |
|--|---|---|---|
| <p>BUSINESS PLATE A Business Plate is a small advertisement identifying the name and/or trade, business or calling of the occupant or business premises. A Business Plate may be painted or affixed to a wall.</p> |  | <p>Maximum surface area of sign residence in a residential area Maximum surface area per business occupant of premises in commercial and mixed use areas</p> | <p>0.3 square metres 0.3 square metres</p> |
| <p>CANOPY SIGN A Canopy Sign is an advertisement, painted or otherwise affixed, to a canopy, whether the canopy is constructed from flexible or solid material.</p> |  | <p>Minimum clearance between the lower most part of the sign and the footway Maximum number</p> | <p>2.4 metres 1 per tenancy frontage</p> |

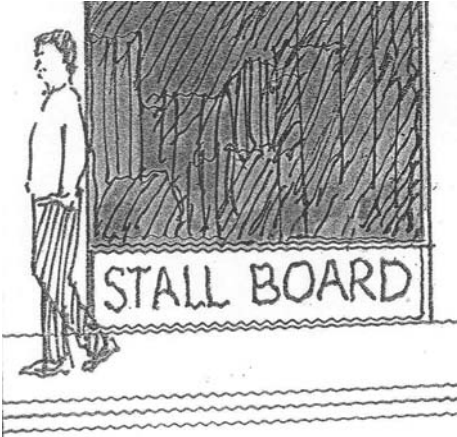

| TYPE OF SIGN | EXAMPLE OF TYPE OF SIGN | ACCEPTABLE STANDARD FOR SPECIFIC SIGN STYLE | |
|--|---|--|---|
| <p>CREATED AWNING LINE SIGN A Created Awning Line Sign is an advertisement attached to and extending beyond a fascia of an awning or the like.</p> |  | <p>Extent</p> <p>Maximum area</p> <p>Minimum clearance</p> | <p>Not more than 0.6 metre above the fascia to which it is attached</p> <p>The created area is not to exceed 25% of the fascia</p> <p>2.4 metres to the footpath pavement</p> |
| <p>FLAG POLE SIGN A Flag Pole Sign is a fabric sign hung from a pole.</p> |  | <p>Maximum surface area</p> <p>Maximum height above ground</p> | <p>3.0 square metres</p> <p>6.5 metres if planted in the ground</p> |

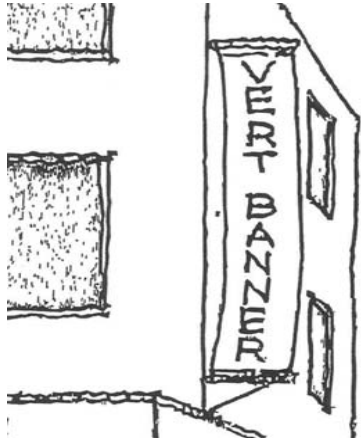

| TYPE OF SIGN | EXAMPLE OF TYPE OF SIGN | ACCEPTABLE STANDARD FOR SPECIFIC SIGN STYLE | |
|--|---|---|--|
| <p>FOOTWAY SIGN A Footway Sign is a portable, freestanding advertisement, normally supported by an 'A' or inverted 'T' frame, and typically displayed on a footway.</p> |  | <p>Maximum size</p> <p>Maximum number Location</p> <p>Other requirements</p> | <p>Height - 1.0 metre Width - 0.6 metre Depth - 0.6 metre</p> <p>1 per tenancy</p> <p>A Footway Sign on a footway is to be positioned near the kerb (but not closer than 0.25 metre) so as to leave clear passage for pedestrians along the footway, particularly the visually disadvantaged who rely on clear passage along the frontage of shops.</p> <p>No footway sign is to be positioned so as to obstruct, clutter or detract from street landscaping, furniture or artwork</p> <p>A Footway Sign not to be located on a public road.</p> <p>A Footway Sign is not to have moving, rotating or animated parts, such as a spinner sign. A Footway Sign is to be displayed only during trading hours and is not to be used for the display of merchandise</p> |
| <p>GROUND SIGN A Ground Sign is a monolithic sign which, in effect, sits on or rises out of the ground.</p> |  | <p>Setting</p> <p>Maximum height Maximum surface area Maximum setback from side boundary Maximum number</p> | <p>Erected within a landscaped environment. Not erected to expose an unsightly back view of the sign. When in a residential area, only permitted where used in a name of a multi-unit development site</p> <p>1.8 metres 10 square metres 3 metres</p> <p>One per frontage for frontages up to 100 metres For frontages over 100 metres, spacing of signs to be no less than 60 metres</p> |

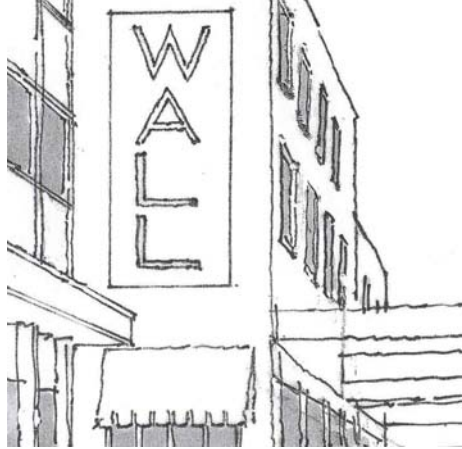

| TYPE OF SIGN | EXAMPLE OF TYPE OF SIGN | ACCEPTABLE STANDARD FOR SPECIFIC SIGN STYLE | |
|---|---|--|--|
| <p>HAMPER SIGN A Hamper Sign is an advertisement, painted or otherwise affixed, between a door head and an awning, or their equivalent levels.</p> |  | <p>Maximum thickness Maximum Extent</p> | <p>0.3 metre from the face of the wall The size and form are to be compatible with the building on which they are located.</p> |
| <p>HIGH RISE BUILDING SIGN A High Rise Building Sign is an advertisement naming or identifying a high rise building by the use of a logo or the like.</p> |  | <p>Maximum extent Maximum number Other requirements</p> | <p>Contained within the actual or created outline of a building or appears as if it was part of the original building if part of a structure creating a changed building outline One per building frontage A High Rise Building Sign is not to contain third party advertising</p> |

| TYPE OF SIGN | EXAMPLE OF TYPE OF SIGN | ACCEPTABLE STANDARD FOR SPECIFIC SIGN STYLE | |
|--|---|---|--|
| <p>LANTERN SIGN A Lantern Sign is a translucent lighting fixture displaying the name and/or trade, business or calling of the occupant.</p> |  | <p>Maximum number for a Home Occupation or Business</p> <p>Maximum edge dimension of lantern</p> <p>Maximum height</p> <p>Maximum illumination</p> | <p>One</p> <p>0.5 metre (ie to fit into a Cube of 0.5 x 0.5 x 0.5 metres)</p> <p>2 metres</p> <p>Not greater than a standard 100 watt incandescent bulb</p> |
| <p>POLE SIGN A Pole Sign is a freestanding sign mounted on one or more vertical supports which has a smaller surface area and a lower height than a Pylon/Column sign.</p> |  | <p>Maximum number</p> <p>Aspect</p> <p>Maximum surface area</p> <p>Maximum height above ground</p> <p>Minimum setback from side boundary</p> <p>Setting</p> | <p>One two-sided pole sign per allotment street frontage</p> <p>Not erected to expose an unsightly back view of the sign</p> <p>2.4m² per side for a maximum of two sides.</p> <p>4.5 metres</p> <p>3 metres</p> <p>Erected within a landscaped environment</p> |

| TYPE OF SIGN | EXAMPLE OF TYPE OF SIGN | ACCEPTABLE STANDARD FOR SPECIFIC SIGN STYLE | |
|--|---|---|--|
| <p>PROJECTING FLAG SIGN A Projecting Flag Sign is a non-illuminated, wall-mounted corporate flag.</p> |  | <p>Maximum size Maximum number Minimum spacing Minimum clearance</p> | <p>0.3 square metre per face 4 per site 2 metres 2.4 metres to the footpath pavement.</p> |
| <p>PROJECTING SIGN A Projecting Sign is a double-faced sign projecting at right angles to a wall and fixed to the wall. A Projecting Sign is not an Under Awning Sign.</p> |  | <p>Minimum clearance between the lowermost point of the sign and the footway Maximum number Orientation Extent Maximum size</p> | <p>2.4 metres One per building frontage Vertical Not projected above the height of the wall to which it is attached Height - 3.0 metres Width - 0.75 metre</p> |

| TYPE OF SIGN | EXAMPLE OF TYPE OF SIGN | ACCEPTABLE STANDARD FOR SPECIFIC SIGN STYLE | |
|--|---|---|--|
| <p>STALLBOARD SIGN A Stallboard Sign is an advertisement, painted or otherwise affixed, at the base of a shopfront, normally below a shop window</p> |  | <p>Fixing</p> <p>Maximum Extent</p> | <p>Fitted flush</p> <p>The size and form are to be compatible with the building on which they are located.</p> |
| <p>UNDER AWNING SIGN An Under Awning Sign is an advertisement suspended under an awning or verandah.</p> |  | <p>Orientation</p> <p>Minimum clearance between the lowermost point of the sign and footway</p> <p>Extent</p> <p>Location</p> <p>Minimum distance between under awning signs</p> <p>Maximum dimensions</p> <p>Minimum setback from side boundary</p> | <p>At right angles to the building frontage</p> <p>2.4 metres</p> <p>Not to project beyond the awning or verandah</p> <p>Central to each shop or tenancy or shopping arcade entrance</p> <p>3.0 metres</p> <p>Length - 2.7 metres or not greater than 75% of the width of the awning or verandah which ever is lesser</p> <p>Height - 0.6 metres</p> <p>Width - 0.3 metres</p> <p>1.5 metres</p> |

| TYPE OF SIGN | EXAMPLE OF TYPE OF SIGN | ACCEPTABLE STANDARD FOR SPECIFIC SIGN STYLE | |
|--|---|---|---|
| <p>VERTICAL BANNER BUILDING SIGN A Vertical Banner Building Sign is an advertisement of non-rigid material normally fixed at the top and bottom to brackets projecting from a building.</p> |  | <p>Maximum height</p> <p>Maximum width</p> <p>Minimum clearance between lowermost point of the sign and the footway</p> <p>Maximum area</p> <p>Minimum spacing between signs</p> <p>Minimum setback from side or rear boundary</p> | <p>Not to project above the height of the adjacent part of the building to which it is fixed and not to exceed 5 metres above ground level</p> <p>0.75 metre</p> <p>2.4 metres</p> <p>2.4 square metres</p> <p>6.0 metres</p> <p>3.0 metres</p> |
| <p>VERTICAL BANNER FREESTANDING SIGN A Vertical Banner Freestanding Sign is an advertisement of non-rigid material normally supported at two or more locations from brackets extending from a freestanding pole.</p> |  | <p>Maximum height (above ground level to top most support)</p> <p>Maximum width</p> <p>Minimum clearance between lowermost point of the sign and the footway</p> <p>Minimum spacing between signs</p> <p>Minimum setback from side boundary</p> <p>Maximum surface area</p> | <p>5.0 metres</p> <p>0.75 metre</p> <p>2.4 metres</p> <p>6.0 metres</p> <p>3.0 metres</p> <p>2.4 square metres</p> |

| TYPE OF SIGN | EXAMPLE OF TYPE OF SIGN | ACCEPTABLE STANDARD FOR SPECIFIC SIGN STYLE | |
|--|---|--|--|
| <p>WALL SIGN A Wall Sign is an advertisement, painted or otherwise affixed, flat to a wall.</p> |  | <p>Maximum thickness (or projection from wall) Maximum number Maximum surface area Location</p> | <p>0.3 metre One per tenancy 20% of wall space or 6 m², whichever is the lesser Ground floor level and first floor level and not to project beyond the edge of the wall.</p> |
| <p>WINDOW SIGN A Window Sign is an advertisement, painted or otherwise affixed, to the glass of a display window.</p> |  | <p>Maximum surface area of sign</p> | <p>25% of the area of the glass panel or panels on which it is displayed</p> |

APPENDIX F

PROPOSED METES AND BOUNDS DESCRIPTION OF THE SECTOR

METES & BOUNDS

TOWN CENTRE FRAME 'C' PRECINCT

TOWN CENTRE FRAME 'C' SECTOR SIX

FROM THE POINT OF COMMENCEMENT BEING ON AMG COORDINATES
EASTING 502101.977 METRES, NORTHING 6987009.018 METRES, THENCE
IN AN EASTERLY DIRECTION AT A BEARING OF 78°20'05"
FOR A DISTANCE OF 92.192 METRES (MORE OR LESS), THENCE
IN A SOUTHERLY DIRECTION AT A BEARING OF 158°09'50"
FOR A DISTANCE OF 52.443 METRES (MORE OR LESS), THENCE
IN A SOUTHERLY DIRECTION AT A BEARING OF 169°32'20"
FOR A DISTANCE OF 13.384 METRES (MORE OR LESS), THENCE
IN AN WESTERLY DIRECTION AT A BEARING OF 258°20'05"
FOR A DISTANCE OF 101.172 METRES (MORE OR LESS), THENCE
IN A NORTHERLY DIRECTION AT A BEARING OF 348°20'05"
FOR A DISTANCE OF 65.0 METRES (MORE OR LESS),
TO THE POINT OF COMMENCEMENT AND CONTAINING AN AREA OF
6354 m² (MORE OR LESS).

We, PMM Group Pty Ltd A.C.N. 010 370 448 hereby certify that the Metes and Bounds description contained herein has been prepared by the company and the AMG connection used for the commencement point has been determined by field survey.

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Cadastral Surveyor/Director