BUSINESS ZONE DESIGN GUIDE

DESIGN REPORT

FOR THE DEPARTMENT OF PLANNING, INDUSTRY AND ENVIRONMENT BY **BENNETT AND TRIMBLE**

DRAFT

30/3/21





INTRODUCTION

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PREPARED BY

Bennett and Trimble Pty Ltd Level 2, 333 George Street Sydney NSW 2000

FOR

NSW Department of Planning, Industry and Environment 4 Parramatta Square 12 Darcy Street Parramatta NSW 2150

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EXECUTIVE SUMMARY

BACKGROUND

The Department of Planning, Industry and Environment (DPIE) is undertaking substantial reform programs to improve the NSW planning system and unlock productivity in NSW. This project – Business Zone Design Guide for Complying Development – is part of *Initiative 4.5 – Supercharging complying development and supporting emerging new industries* of the Planning Reform Action Plan.

The purpose of Initiative 4.5 is to provide a streamlined assessment pathway for jobcreating development where the environmental impacts are well understood and manageable through development standards. These reforms are intended to support greater innovation by better tailoring assessment processes based on risk and complexity.

Initiative 4.5 will expand complying development provisions in employment zones as well as support emerging industries, such as data centres, so that more activities can be undertaken without the need for a development application. The planning and building standards will need to be such that they are able to be signed off by an accredited certifier.

DPIE is finalising an evidence base for the Supercharging Complying Development Project based on the outcomes of a Market Soundings and Insights project, the Reimagining Complying Development project and advice of an independent Quality Control Panel.

A key recommendation of the above work is to provide a new complying development pathway for certain types of commercial and other employment generating development within specific business zones. These may include new build office, commercial, business premises, medical centres and data centres up to 4-5 storeys and 10,000m² as complying development. These provisions are proposed to be limited to the B5 Business Development, B6 Enterprise Corridor and B7 Business Park zones.

OBJECTIVES

The objectives of the Business Zone Design Guide for Complying Development project is to:

- Provide a framework for good design outcomes that are achieved for new builds and alterations for specific commercial development types under the proposed complying development reforms.
- Prepare a concise and effective set of design principles, objectives and design criteria for new builds and additions to commercial premises that can be verified by an accredited building designer through a Design Verification Statement as part of a Complying Development Certificate approval.
- Provide illustrative sketches, diagrams and photographs to visually supplement the text and provide best practice planning and design practices to the development types.

METHODOLOGY

The methodology is described in greater detail within this report, but can be summarised as:

Development Typology Analysis

- An overview survey of typical precincts and building types found within the B5, B6, and B7 Zones in metropolitan Sydney and regional NSW.
- Analysis of the urban characteristics of commercial building types within the zones
- A comparative analysis of specific criteria to understand common characteristics
- Outlining observations and identifying areas of improvement
- Identifying typologies based on urban characteristics

Development of the Draft Design Guide

- Establishing appropriate Design Criteria for commercial buildings within the specified zones.
- Identifying Design Criteria that are common across typologies
- Identifying Design Criteria specific to the typologies.

CONSULTATION

During the preparation of the Draft Design Guidelines the following meetings and consultation has been undertaken; - Weekly meetings with DPIE to

review progress,
Reviews with the Government Architect NSW

STUDY LIMITATIONS

The Typology Analysis is a desktop review only and based on publicly available information, including the DPIE Spatial Viewer for mapping and aerial photography, and Google Streetview for ground level images.

While an attempt has been made to capture a broad and inclusive set of precedents for analysis, it is limited and not an exhaustive assessment of all possible areas or types.

All dimensions, areas, and figures within the precedent studies are indicative and based off aerial photography, and assumptions have been made where available information is inadequate.



KEY FINDINGS

ABOUT THE DESIGN GUIDE

ABOUT THE GUIDE

The Business Zone Design Guide for Complying Development (Business Zone Design Guide) provides planning and design standards for a range of commercial development types across NSW.

It has been prepared to assist developers, planners, urban designers, architects, building designers, landscape architects, builders and other professionals when designing and preparing a complying development proposal for certain types of commercial development.

It also informs the community of what is required to achieve good design and planning practice for commercial development as complying development.

WHO IS THE BUSINESS ZONE **DESIGN GUIDE FOR?**

The Business Zone Design Guide has been prepared to:

- assist developers, planners, urban designers, architects, building designers, landscape architects, builders and other professionals when designing commercial buildings and preparing a complying development proposal;
- assist planning professionals in local and state government with strategic planning and preparing local controls; and
- inform the community of what is required to achieve good design and planning practice for commercial buildings, as complying development.

WHEN DOES THE BUSINESS ZONE **DESIGN GUIDE APPLY?**

The Business Zone Design Guide is referenced in State Environmental Planning Policy (Exempt and Complying Development Codes 2008) Codes SEPP.

It contains the Design Criteria that must be met in order to obtain a complying development certificate (CDC) under Part 5A Commercial and Industrial (New Buildings and Additions) Code for specified types of development within the land use zones:

- B5 Business Development
- **B6 Enterprise Corridor**
- **B7 Business Park**

WHAT TYPES OF DEVELOPMENT DOES THIS GUIDE APPLY TO?

This guide only relates to developments and additions types listed in [part, section] of the SEPP, up to 10,000m² in floor area in zones B5 Business Development, B6 Enterprise Corridor and B7 Business Park.

The proposed land use must also be permitted within the zone under the local planning instrument such as the Council local environmental plan or state planning policy.

The specified development types are:

- Commercial premises (including business premises, office premises and retail premises but excluding markets, pubs, small bars and timber vards)
- Storage premises including data centres
- Medical Centres
- High technology industry
- Veterinary hospitals
- Local distribution premises
- Health manufacturing facilities
- Recreational facilities (indoor)
- Entertainment facility
- Function centres
- Health consulting rooms
- Community facilities
- Vehicle repair station
- Wholesale supplies
- Amusement centres
- Information and education facilities

Proposals can also contain a mix of the above land uses up to the total maximum floor area allowed.

AIMS OF THE GUIDE

The Business Zone Design Guide is intended to help achieve better design and planning for commercial development by providing the requirements for designing and assessing these as complying development.

The aims of the guide are to:

- Deliver quality design outcomes for commercial development that are responsive to place and context;
- Manage surrounding amenity and environmental impacts of commercial development;
- Ensure commercial development is connected to the street and provides a safe environment for visitors and workers:
- Improve the integration of green infrastructure, and sustainability outcomes for commercial development and:
- Provide guidance on how to prepare a CDC application using the guide

RELATIONSHIP TO OTHER POLICIES

Relationship to State Environmental Planning Policy (Exempt and Complying **Development Codes) 2008**

The Codes SEPP contains the majority of exempt and complying development for commercial and industrial development complying development standards. This includes development standards for new builds as well as alterations and additions.

The site must meet the general requirements for complying development set out in Part 1 of the Codes SEPP. These are known as land-based exclusions and further information can be found on the Department's website.

Relationship to development control

plans and council policies The Design Criteria refers to development control plans (DCP), precinct plans or council policies for certain matters that apply to the land, such as stormwater and waste collection and local character statements.

A DCP can also contain local strategic planning statements that describe local character and will inform the content of the Design Verification Statement and site analysis required by the Design Criteria.



Relationship to other legislation

Under the Code, the type of development must be permissible under the council's local environmental plan or the relevant environmental planning instrument.

The proposal must be consistent with any applicable development standards under the relevant planning instrument applying to the land, such as height of building, floor space ratio or a specified control for maximum floor area.

It may also be necessary to consider other legislation and regulations including:

- Environmental Planning and Assessment Act 1979 (EP&A Act)
- Environmental Planning and Assessment Regulation 2000 (EP&A Regulation)
- State Environmental Planning Policies Local Environmental Plan
- Roads Act 1993
- Conveyancing Act 1919
- Local Government Act 1993
- Food/Liquor Act 2007
- Food Regulation 2015
- Public Health Act 2010

B5-B7 ZONES - DISTRIBUTION

The B5-B7 Zones are sparsely located throughout NSW metropolitan and regional centres. They do not include residential uses and located outside of town centres.

The aerial images below show a selection of areas that demonstrate the typical distribution of these zones in metropolitan Sydney and selected regional areas. The B5 and B6 zones are typically linear, following main roads.

In regional areas, B5-B7 Zones are typically located at the periphery on the main road approach to the town.

LAND USE ZONE











B5-B7 ZONES - EXISTING CHARACTER

B5 - BUSINESS DEVELOPMENT

The B5 Zone is generally located along main roads, and on blocks behind main roads.

Building types are generally single storey with some two storey office and business use buildings.

Buildings are often heavily branded and conform to corporate style guides, with little differentiation due to the local context. Large areas of hardstand for parking and manoeuvring, with little shading are common.

B6 - ENTERPRISE CORRIDOR

The B6 Zone is generally located along main roads, and on blocks behind main roads.

Building types are generally two to three storeys. Office uses, car showrooms, and business uses are common.

Buildings are typically address the street, with parking behind the building line or below the building.

Built form quality and character varies greatly depending on the use and location.

B7 - BUSINESS PARK

B7 Zones are generally located in consolidated areas off main roads and motorways, with some B7 zones as linear areas along main roads.

Built form is typically three to six storeys, and uses include office buildings, storage facilities, and data centres.



MAIN ROAD OFFICE BUILDING

4 Broadcast Way Artarmon

MAIN ROAD

Artarmon



STORAGE FACILITY 269 Pacific Highway







BUSINESS PARK DATE CENTRE

4 Eden Park Drive Macquarie Park



BUSINESS PARK OFFICE BUILDING

6 Columbia Drive Norwes



LIGHT INDUSTRY WAREHOUSE

MAIN ROAD

South Nowra

MAIN ROAD

Bankstown

SPECIALISED RETAIL

1618 Canterbury Road

SPECIALISED RETAIL

144 Princes Highway

15 Bradwardine Road Bathurst

BUSINESS PREMISES INFILL DEVELOPMENT

97 Hunter Street Hornsby

CORNER SITE OFFICE BUILDING

6 Bridge Road Hornsby









IMAGE SOURCES: GOOGLE STREET VIEW





BUSINESS ZONE DESIGN GUIDE FOR COMPLYING DEVELOPMENT - DRAFT FOR EXHIBITION AND COMMENT

MAIN ROAD CAR SHOWROOM

MAIN ROAD

51 Parramatta Road Concord

ESTABLISHED URBAN ΔRFΔ

OFFICE BUILDING LIGHT INDUSTRY

51 Bourke Road Alexandria

BACK BLOCK

16 James Street Waitara









BUSINESS PARK OFFICE BUILDING

24 Talavera Road Macquarie Park





Buildings are often free standing buildings, surrounded by landscaping and carparking. The quality of the built form, urban design, and landscaping is generally higher than the B5-B6 zones.







COMPLYING DEVELOPMENT

WHAT IS COMPLYING **DEVELOPMENT?**

Complying development is a combined planning and construction approval for straight forward development that can be determined through fast-track assessment by a Council or accredited certifier. This includes certain development covered by this guide including:

- Commercial premises (including business premises, office premises and retail premises but excluding markets, pubs, small bars and timber yards)
- Storage premises including data centres
- Medical Centres
- High technology industry
- Veterinary hospitals
- Local distribution premises
- Health manufacturing facilities
- Recreational facilities (indoor)
- Entertainment facility
- Function centres
- Health consulting rooms
- Community facilities
- Vehicle repair station
- Wholesale supplies
- Amusement centres
- Information and education facilities

A complying development certificate (CDC) must be obtained from an accredited certifier or Council before any work starts.

The certificate is a combined planning and building approval. Before starting complying development, applicants must find out what planning controls apply to the land. A section 10.7 planning certificate from council will outline the planning controls that apply to the land.

This will assist the accredited certifier in identifying any restrictions that may prevent complying development from being carried out on the land.

REQUIREMENTS FOR COMPLYING DEVELOPMENT IN B5-B7 ZONES

For a development to be complying development it must be permissible with consent in the land use zone under the relevant council's Local Environmental Plan (or other environmental planning instrument).

You can find out the zone of your land at the Planning Viewer website (www. planningportal.nsw.gov.au).

Complying development under the Commercial Building Code is not permitted on certain land listed in Part 1.19 (5) of the Codes SEPP. These include:

- Heritage Conservation Areas
- Land reserved for a public purpose
- Land identified as having an acid sulfate level of class 1 or class 2
 - Land that is significantly contaminated
- Land affected by coastal hazards
- Environmentally sensitive land Some unsewered land

Where a lot is only partly affected by a landbased exclusion, complying development is allowed on the parts of the lot which are not affected.

All works must comply with the requirements of the Building Code of Australia.

Complying development does not override private covenants or similar legal instruments. For example, if a covenant limits building heights this will continue to apply to the land.

If your development does not satisfy all the development standards or is proposed on land which is excluded under the Codes SEPP, a complying development certificate cannot be approved. A development application must be lodged for this development.

THE COMPLYING DEVELOPMENT ASSESSMENT PROCESS

Complying development is a fast track approval process for straightforward residential, commercial and industrial development. It combines the planning and building approval into one application. Providing the application meets specific criteria, it can be determined by an accredited council or private certifier without the need for a development application (DA).

Approval for development types covered by Part 5 of the Codes SEPP and the Commercial Building Design Guide can be obtained by applying for a CDC.

Development standards

The proposed development must comply with the development standards contained within Part 5 of the Codes SEPP. **Design Criteria**

The Codes SEPP requires that the proposed development satisfies the relevant Design Criteria contained in Section 3 of the Business Zone Design Guide.

DESIGN VERIFICATION

For buildings of 3 or more storeys a registered architect is required to certify that the design of the development is consistent with the Design Criteria in the Design Verification Statement.

Developments with open space of greater than 1,000m² require a a design by a registered landscape architect.

For all other developments a designer or a building designer that is accredited by the Building Designers Association of Australia is required to certify that the design of the development is consistent with the Design Criteria in the Design Verification Statement.



STEPS FOR PREPARING A COMPLYING DEVELOPMENT

CONFIRM PERMISSIBILITY Check land use zoning as shown in the NSW Planning Portal to view the Local Environmental Plan

COMPLY WITH LAND BASED REQUIREMENTS

Refer to State Environmental Planning Policy (Exempt and Complying Development Codes) 2008

CHECK LEP FOR DEVELOPMENT STANDARDS E.g. Height of buildings, Floor space ratio

COMPLY WITH DEVELOPMENT **STANDARDS** Part 5A - Commercial and Industrial New Building Code

CHECK DCP FOR **RELEVANT CONTROLS** E.g. Precinct Plans, Local Character Areas and any other relevant provisions

DETERMINE SITE CATEGORY Free Standing Site or Infill Site

DETERMINE BUILDING TYPOLOGY Select the appropriate typology

CONSISTENCY WITH DESIGN CRITERIA Business Zone Design Guide Complete Design Criteria Checklist

DESIGN VERIFICATION Prepare Design Verification Statement

GUID DE ШN

INTRODUCTION

DESIGN PRINCIPLES

New development has the potential to transform quality of life for people, stimulate the economy and enhance the environment. The design of the built environment shapes the places where we live, work and meet. The quality of design affcts how spaces and places function, how they integrate, what they contribute to the broader environment, and the users, inhabitants and audiences they support or attract. - **Better Placed**, Government Architect NSW 2017

WHAT IS GOOD DESIGN?

Good design is integral to creating sustainable and liveable communities. As a core planning principle, planners, designers and decision makers should always seek to achieve high quality design outcomes.

Achieving good design is about creating places and buildings that respond in a creative and practical way to enhance the function and identity of a place.

The promotion of 'good design' is an objective The Environmental Planning and Assessment Act 1979.

'Better Placed – an integrated design policy for the built environment of NSW' establishes a baseline of what is expected to achieve good design across all projects in NSW, and outlines seven objectives for good design.

This guide seeks to ensure that the identified commercial development under the code achieves good design, consistent with the aims of the guide.

DESIGN PRINCIPLES

Five (5) Design Principles underpin the objectives of the Code. These Design Principles are a recognised means of assessing design quality and ensure the development carried out under this guide can be responsive to local character and place, integrated and resilient.



PRINCIPLE 1 PLACE AND CONTEXT

Buildings should respond to the existing or desired future character and urban form of their local area. Commercial building typologies included under this code are often located in areas with little local character, on main roads, and within business parks.

New commercial developments have the opportunity to make a positive contribution to their local area and to influence the future growth of the local area through considered design decisions.

The interface of the development site with the public domain is an opportunity to make areas of public amenity, through landscaping, shade, pedestrian paths, active ground floor uses, and welcoming entries.



PRINCIPLE 2 INTEGRATION AND CONNECTION

Commercial Buildings drive employment and commerce. They support local centres and complement other businesses to create productive commercial environments.

They must be welcoming, equitable and inclusive.

Where possible commercial developments under this code should contribute to the changing nature of employment centres and business parks, as they diversify from single use areas. They are increasingly mixed use, offering a diverse range of services and facilities, for employment, recreation, and well-being.

Commercial building developments should be integrated with and connect to local social and movement infrastructure, to support a well connected business zone.



PRINCIPLE 3 AESTHETICS AND APPEARANCE

Commercial Buildings make an important contribution to the urban environment. They are located in prominent locations on main roads, in urban areas, and adjoining residential neighbourhoods.

They are places of work for employees, provide key services, and are retail destinations for customers. A well designed building will make a positive contribution to the daily lives of these people.

Commercial buildings are designed within a number of constraints including, highly competitive commercial markets, hostile sites on busy roads, and predefined corporate style guides and design standards. However, through careful site planning, landscaping, and the considered design of the built form, good design, and places with beauty and character can be made within these constraints.

The built form should exhibit good proportions and a balanced composition of elements that reflects the building's use, its structure, and internal planning.



PRINCIPLE 4 GREENING THE GREY

Environmental sustainability and responsiveness is essential to meet the highest performance standards for living and working. Sustainability is no longer an optional extra, but a fundamental aspect of functional, whole of life design.

Commercial developments must incorporate meaningful landscaped areas that address the urban heat island effect, and support and regenerate local microclimates.

Landscaped areas provide a buffer to sometimes tough urban environments, and support the physical and mental health of employees and workers.

Good design of Commercial buildings incorporates passive environmental measures to reduce energy usage and ongoing maintenance and operational costs.





PRINCIPLE 5 RESILIENT BUILDINGS

The design of the built environment must seek to address growing economic and social disparity and inequity, by creating inclusive, welcoming and equitable environments.

Having a considered, tailored response to the program or requirements of a building or place, allows for efficiency and usability with the potential to adapt to change. Buildings and spaces which work well for their proposed use will remain valuable and wellutilised.

Adaptability and good design principles will help to future proof sites and buildings so that they may be adapted for new uses as they arise.

SITE CATEGORIES

DEVELOPMENT SITE CHARACTERISTICS:

Sites for commercial buildings within B5-B7 zones broadly fit into one of two categories:

- Free Standing Sites
- Infill Sites

This categorisation is primarily determined by the predominant side setbacks within the urban block that the site is located on.

Blocks with predominantly zero setbacks at side boundaries are generally Infill areas.

Blocks with multiple buildings that have side setbacks on both sides of the lot, or large setbacks to one side boundary, are generally Freestanding Sites.

Greenfield sites: Greenfield sites should refer to precinct plans, masterplans and DCPs to determine the appropriate site category.

DETERMINING SITE CATEGORY:

To determine if a site is considered an Infill of Free Standing site under the Business Zone Design Guide,





INTRODUCTION **TYPOLOGIES**

1:4000

The six typologies have been identified through a precedent study and analysis of existing business zones (Appendix A). These commercial building types are prevalent within the B5-B7 zones, and demonstrate specific urban design and architectural characteristics.









ALL RULE REAL PROPERTY.













TYPOLOGY F DATA CENTRE **TYPICAL CHARACTERISTICS:** Zones: B7 Use: Data Centre

Site Type Free Standing

Location: Business Park







TYPOLOGIES



TYPOLOGIES TYPOLOGY A

MAIN ROAD RETAIL

TYPICAL CHARACTERISTICS:

Zones:	B5, B6
Storeys:	1-2
Uses:	Specialised Retail
	Hardware and Building Supplies
	Business Premises
Site Type:	Free Standing
Location:	Main Road
	Business/Light Industrial Areas

DESCRIPTION

Free standing buildings with large setbacks to the street, rear boundary and at least one side boundary.

These buildings are typically found on main roads in B5 and B6 zones, and are used for Specialty Retail, Hardware and Building Supplies and Business Premises.

While building form, materials and character often respond to corporate branding and style guides, there are opportunities for throughful architecture that responds specifically to the immediate context, uses colour and materials in considered ways, and incorporates environmental initiatives.

External areas are primarily used for parking and manoeuvring. There is a large opportunity to improve this through landscaping and shade trees.

OPPORTUNITIES:

- Improved landscaping provisions, deep soil areas, and tree canopy cover, to shade hardstand areas, carparking, and building facades, to reduce the urban heat island effect.
- Maximum setbacks to street to reduce the extent of carparkig in front of building, and to increase the urban activation provided by the use, and to reinforce the street edge.
- Provide dedicated accessible pedestrian paths from the public domain to the building entry
- Minimum dimensions of active street frontage







TYPOLOGY B

1-3 STOREY OFFICE AND BUSINESS USES

TYPICAL CHARACTERISTICS:

Zones:	B5, B6
Storeys:	1-3
Uses:	Office Premises
	Business premises
	Specialised Retail
	Hardware and Building Supplies
	Light Industry
Site Type:	Main Road, Infill
Location:	Main Road
	Business/Light Industrial Areas

DESCRIPTION

Free standing and attached buildings, typically two to three stories, with small or zero setbacks to street frontages.

Sites are located on main roads, light industrial areas, and bordering residential areas. They are typically found in B5 and B6 zones.

Uses include Office Buildings, Business Premises, Retail and Light Industry.

Building quality is varied by use, age, and location.

External areas, where present are located to the side and rear, and generally used for parking and servicing.

OPPORTUNITIES:

- Allow zero setbacks to reinforce street edges. Particularly for the primary street frontage of corner sites.
- Minimum percentage of active street frontage, and controls for character and quality of active frontage
- Provision for deep soil planting and permeable surfaces to side and rear of block, in place of street setback areas
- External shading to glazing according to orientation to reduce heat loading and reliance on mechanical air conditioning













TYPOLOGIES TYPOLOGY C

4-5 STOREY OFFICE BUILDING

TYPICAL CHARACTERISTICS

B7 Zones: Storeys: 4-5 Uses: Site Type: Location:

Office Premises Business premises Free Standing, Infill Main Road **Business Park**

DESCRIPTION

Free standing and attached buildings, typically three to five stories with setbacks varying across site type and locations.

Sites are located on main roads, business parks, and commercial areas and are typically found in B6 and B7 zones.

Uses include Office Buildings, Business Premises, Professional Suits and Medical Centres.

Investment in building quality is generally higher than in the other typologies, due to greater floorspace.

Setbacks are typically used for landscaping and tree planting. On grade carparking areas often include trees for shade.

OPPORTUNITIES:

- Allow zero setbacks for infill sites to reinforce street edges. Particularly for the primary street frontage of corner sites.
- External shading to glazing according to orientation to reduce heat loading and reliance on mechanical air conditioning
- Provide dedicated accessible pedestrian paths from the street to the building entry seperate to driveways





TYPOLOGY D

SELF STORAGE FACILITY

TYPICAL CHARACTERISTICS:

B7 Zones: Storeys: 3-5 Uses: Self Storage Facility Infill Site Type: Business Park, Main Road Location:



DESCRIPTION

Free standing and attached buildings, typically three to five stories, with small or zero setbacks to street frontages.

Sites are located on main roads, business parks, and commercial areas. They are typically found in B6 and B7 zones.

Given their use, self storage buildings are typically lack activation characterised by blank or mute facades.

Building entries, circulation corridors, and internal stairs provide opportunities for activation and enlivening of facades and street presence.

Loading areas and vehicular access are important considerations for the function of these buildings and need to be considered alongside their impact on the public domain.

OPPORTUNITIES:

- Clear and legible building entries visible from the public domain
- Provide dedicated accessible pedestrian paths from the street to the building entry
- Articulation and material selections to address large areas of black facade.







TYPOLOGIES TYPOLOGY E

MOTOR VEHICLE SHOWROOM

TYPICAL CHARACTERISTICS

B6. B7 Zones: Storeys: 1-3 Uses: Car showrooms Free Standing, Infill Site Type: Main Road Location:

DESCRIPTION

Free standing with varying setback to the street, small rear setback and commonly one large side setback

These buildings are typically found on main roads, in B5 and B6 zones.

Built form quality varies significantly by brand, location and site type. Building form, materials, and character is often dictated by corporate style guides and branding. Large areas of glazed facade, and gestural building forms are common.

Street setbacks are typically hardstand areas used for showroom and visitor parking. Tree planting and landscaping is often minimal within hardstand areas.

OPPORTUNITIES:

- Provide dedicated accessible pedestrian paths from the street to the building entry
- Minimum site coverage controls to limit hardstand areas for the storage of vehicles





TYPOLOGY F

DATA CENTRE

TYPICAL CHARACTERISTICS

B7 Zones: 4-5 Storeys: Use: Site Type Location:





DESCRIPTION

Free standing with large setbacks to all boundaries.

These buildings are typically found in business parks (B7 Zoning).

Built form quality is generally higher than in the other typologies, due to higher land costs and greater floorspace.

Corporate style guides and branding are common in the data centre typology. Screening of mechanical plant commonly features as a prominent element of the facade.

Large street setbacks are used for landscaping and tree planting. On grade carparking areas are usually smaller in scale than other building uses in this zone.

OPPORTUNITIES:

- Clear and legible building entries visible from the public domain
- Visual and acoustic screening to plant and equipment
- Articulation and material selections to address large areas of black facade.
- Provide dedicated accessible pedestrian paths from the street to the building entry
- Minimum landscaping provisions; including permeable surfaces, deep soil areas, and tree cover to reduce the urban heat island effect and stormwater runoff.









DESIGN CRITERIA



ABOUT THE DESIGN CRITERIA

ABOUT THE DESIGN CRITERIA

The Design Criteria section sets out the design objectives and the specific criteria required to be satisfied and verified for a Complying Development.

Each sub-section of the Design Criteria includes:

- The relevant Design Principles,
- An explanation of the background and rationale behind the objectives and criteria,
- Explanatory diagrams describing specific aspects of the design criteria,
- A table including the Objectives, the Design Guidance, and the Design Criteria.



THE DESIGN CRITERIA

The Design Criteria are divided into to the following sections:

Urban Design and Site Planning

These controls describe how the development sits within the public domain and the local context. How it sits on the site and the overall envelope controls that describe the permissible development volume.

Designing the Development

These controls outline the parameters that define the design of the development including external spaces and functions, and the building design.

Environmental Performance

These design criteria outline the performance of the development, including its environmental impacts, impacts of external factors, and the site servicing.

RELATIONSHIP BETWEEN THE DESIGN PRINCIPLES AND DESIGN CRITERIA

This matrix describes the relationship between the Design Criteria and the Design Principles, and where they interact.

ANNING	3A - RESPONSE TO PLACE
	3B - ORIENTATION AND SITING
E PL/	3C - SITES ADJOINING RESIDENTIAL
ID SIT	3D - GREEN INFRASTRUCTURE
SN AN	3E - PUBLIC DOMAIN INTERFACE
DESIC	3F - BUILT FORM AND MASSING
BAN	3G - SITE ACCESS
IJ	3H - PARKING
IGN	3I - AMENITY
DES	3J - APPEARANCE AND MATERIALS
	3K - NOISE
NCE	3L - ENERGY
DRMA	3M - WATER
PERF	3N - WASTE
-	30 - SAFETY





3A - RESPONSE TO PLACE

RELATED DESIGN PRINCIPLES:

Design Principle 1:	Pla
Design Principle 2:	Int
Design Principle 3:	Ae
Design Principle 5:	Re

Place and context Integration and connection Aesthetics and appearance Resilient buildings

A detailed understanding of the overall site context is the starting point of designing an appropriate response to place. Responding to place not only considers the the physical elements that comprise of the context such as natural and built features, but also social, economic and environmental factors.

A detailed site analysis should be prepared at the beginning of the design process. The analysis should identify the opportunities and constraints of the site and the wider area. This should be undertaken at the local, neighbourhood and streetscape, and site scale to understand how the development responds to the context at the varying scales.

In addition to understanding the existing context, a development will need to respond to the desired future character of an area. Councils often establish the desired future character of an area through consultation with community, industry and other key stakeholders. These can take the form of Character Areas, Precinct Plans, Development Control Plans or master plans.



FIG. 3A.1 Example of a Local Scale drawing.



FIG. 3A.2 Example of a Neighbourhood and Streetscape Scale drawing.



Example of a Site Scale drawing.

OBJECTIVE

Objective 3A-1

The built form, articulation and scale relates to the local character of the area and the context.

- DESIGN GUIDANCE
- The proposed development should be desig consideration to the local context, character uses, and the public domain.
- A Site Analysis should be undertaken to und the site in the context of the Local Scale, Neighbourhood and Streetscape Scale, and Scales:

Local Scale.

Approximately 1km radius from site. The proposed development should consider infrastructure and services that may support development including:

- Public Transport and Active Transport (to reliance on private vehicles and parking)
 Local Shops
- Public Open Spaces (as spaces for recreative respite for employees)
- Support Services (gyms, cafes, childcare)

Neighbourhood and Streetscape Scale

A detailed consideration of the immediate of the site, the public domain, and neighbourin properties. The Neighbourhood scale should

- The height, scale, and proportions of the a properties and the street
- The built form character of existing buildir
 Existing landscaping, open spaces, green

Site Scale

A detailed consideration of the subject site

- immediate surrounds including:
- Relationship to the public domain
- Neighbouring uses, and structuresBuilt form
- Landscape and vegetation
- Contours and slope
- Contamination
- Easements
- Service and utility requirements
- Stormwater

Objective 3A-2

Built form makes a positive contribution to Local Council Character Areas. Refer to any council Character Areas, Indica plans, DCPs, or master plans that apply to t the development.



	DESIGN (CRITERIA
gned with r, existing	3A-1.1	A Site Analysis Drawing is included in the drawing set.
derstand I Site	3A-1.2	Provide a detailed description in the Design Verification Statement of how the proposed development responds to the: - Local Scale - Neighbourhood Scale - Site Scale
r local t the reduce	3A-1.3	Detail how the proposed development makes a positive contribution to the public domain and the character of the local area.
ation and		
ontext of ig d address: adjoining		
ngs I corridors		
and the		
ative layout he site of	3A-2.1	Provide a description in the Design Verification Statement of the provisions of council Character Areas, Precinct Plans, DCPs, or master plans that apply to the site, and list how the proposed development complies with their provisions.

3B - ORIENTATION AND SITING

RELATED DESIGN PRINCIPLES:

Design Principle 1: Place and context Design Principle 3: Aesthetics and appearance

Design Principle 2: Integration and connection

Orientation refers to the position of a building and its internal spaces in relation to the site, the street, the subdivision layout, and neighbouring buildings.

Orientation influences the urban form of the street and the character of the local area.

Orientation and siting also affects the amenity of the occupants of the building through access to daylight, the location of landscaping, outlook, and visual and acoustic privacy.



FIG. 3B.1 Buildings are oriented to the street.



FIG. 3B.2

Cut and Fill should be balanced as closely as possible.



OBJECTIVE DESIGN GUIDANCE Objective 3B-1 Buildings are oriented to the Buildings should be oriented to the primary street and site boundaries, to boundary to reinforce the street edge. reinforce streets, and provide Where possible the primary facade of the bu consistent orientation within should be parallel to the street boundary. precincts. - Large areas of on grade car parking betwee street and the building should be avoided. V possible locate parking behind the building **Objective 3B-2** Buildings and sites are designed Site planning should consider the aspect of to preserve the amenity of (north, south, east and west orientation), how adjacent public open spaces. affects daylight access and potential oversh of public open spaces, streets, and uses. **Objective 3B-3** Building siting and orientation On sloping sites, the site planning and build should consider the natural slope of the site responds to the site topography to minimise cut and fill, and the Where possible orient long buildings with co extent of retaining walls where to minimise level changes, excavation, and possible. walls. Where possible cut and fill is balanced to mi and fill removed from or brought to site. - Buildings should step down the site as it slo **Objective 3B-4** Minimise impact on existing - To protect existing vegetation, excavation or construction of sub surface spaces should r vegetation. place within areas that may disturb the root trees on public land, neighbouring properties trees required to be protected on the subject **Objective 3B-5** Site services and utilities are Engage specialist consultants and services Dial Before You Dig to determine the extent available. location of existing services on the site. **Objective 3B-6** Site Coverage for specific types A minimum site coverage of certain typologi is set to avoid large areas of order to prevent large areas of open hardsta open hardstand. example storage areas for car show rooms.

No excavation within setbacks or below new trees or trees nominated for retention



	DESIGN (CRITERIA
street uilding n the Vhere line.	3B-1.1	Buildings are oriented to the street, and the principal form follows the boundary orientation.
the site w this nadowing	3B-2.1	Buildings do not increase the overshadowing of any public open spaces between the hours of 9am - 3pm on June 21
ling design e. ontour lines retaining inimise cut opes.	3B-3.1	 Unless the building is over a basement, the ground floor: Is not more than 1m above ground level on a flat site For sloping sites, is not more than 1m above ground level at the lower end of the slope, and no more than 1m below ground level at the upper end of the slope.
r the not take systems of is, and any ot site.	3B-4.1	 Excavation and basement uses, including any carparking, must not be provided: within the prescribed setback areas, within the drip line of any significant trees marked for retention on the subject site, neighbouring properties, or public land
such as and	3B-5.1	All lots must have access to reticulated water, sewer, electricity, telecommunications and where available, gas.
ies is set in and. For	3B-6.1	Type E - Car Showroom Minimum site coverage: 40%

3C - SITES ADJOINING RESIDENTIAL

RELATED DESIGN PRINCIPLES:

Design Principle 4: Design Principle 5:

Greening the grey **Resilient buildings**

Business Development, Enterprise Corridor, and Business Park Zones are often located adjacent to Residential and Mixed Use zones. Commercial developments in these locations should be good neighbours and consider the impact of any new development on nearby residential uses.

Traditionally, business hours of operation did not typically overlap with time spent in the home. However, with an increase in the number of people working from home, flexible working hours, shift work, and non-traditional working arrangements, there is an increasing overlap between these uses.

Where the B5-B7 zones adjoin residential zones, commercial developments should consider the amenity of residential homes and open spaces. Site planning and building design should be undertaken to minimise impacts on:

- Solar access and daylight to living areas and private open spaces
- Visual privacy and overlooking
- Acoustic privacy
- Built form and massing



Example location where Business Zoning adjoins Residential Zoning.



FIG. 3C.2

Building height and form designed to not overshadow neighbouring residential.



FIG. 3C.3 Where openings overlook residential uses, they are to be screened to maintain privacy

OBJECTIVE DESIGN GUIDANCE **Objective 3C-1**

Developments adjoining or Adjoining residential uses should be surveyed overlooking residential properties drawn to scale, noting private outdoor areas should consider the impact of and opening, and building footprints. the development on those properties.

- The proposed development should be positi oriented on the site to minimise the impact residential areas and uses.
- The built form and massing of commercial b should transition in scale from the from the commercial context, down to the residential
- Landscaped areas can act as buffers to resi uses, using densely planted trees as acoust visual screens.

Objective 3C-2

Commercial development should not reduce the existing Solar Access of neighbouring residential areas.	 Prepare shadow studies to understand the overshadowing impacts of the proposed develop on residential areas. Design the built form envelope to minimise overshadowing of residential areas. Refer to local council DCPs and the Apartmet Guide for specific overshadowing controls for residential properties, private open space, an areas.
Objective 3C-3	
Acoustic Privacy - Noise transfer to neighbouring residential uses is minimised through the siting of buildings and building layout.	 Depending on their use, commercial building: generate noise at levels that are unacceptabl adjoining or nearby residential uses. Noise generating uses should be located awa residential areas, and screened with appropri acoustic treatment to bring noise levels within approved levels.
Objective 3C-4	
Visual Privacy of neighbouring residential areas is maintained through the orientation and siting of the building, and where required, screening.	 Commercial buildings should be oriented on a minimise opportunities for overlooking of resi living areas, and private outdoor space. Where overlooking is unavoidable, openings a enable a view to private areas should be treat maintain the privacy of residential areas. Opti

include; angling openings to orient the view using obscure glazing to lower portions of w fixed external louvres



DESIGN CRITERIA

ed and s, windows ioned and	3C-1.1	The Design Verification Statement must outline how the building siting and orientation considers the amenity of and impacts on any adjoining residential areas or uses.
on ouildings I scale.	3C-1.2	Where the site adjoins residential uses, a survey of the adjoining residential lots is provided including lot boundaries, built form footprints, roof heights, private open space, windows facing subject site, spot levels.
idential ic and	3C-1.3	Where the site adjoins residential uses the built form steps down in scale toward the boundary shared with residential uses
	3C-1.4	Landscaping is provided along boundary to residential uses including screening trees.
velopment	3C-2.1	Demonstrate compliance with local DCP controls for overshadowing of residential properties, private open space and living areas.
ent Design or Ind living	3C-2.2	Demonstrate compliance with the Solar and Daylight Access provision in the Apartment Design Guide Objective 4A-1 (or equivalent) to maintain minimum solar and daylight access to neighbouring residential apartment buildings.
gs may ble to	3C-3.1	Noise generating uses are acoustically screened and located away from residential uses.
vay from riate nin	3C-3.2	Noise generated by the proposed development complies with the noise controls as outlined by NSW Environmental Protection Agency and within the Codes SEPP.
n the site to sidential	3C-4.1	Provide privacy screening to any opening or outdoor areas that overlook any residential living areas or private open space.
s that ated to otions may elsewhere, vindows,	3C-4.2	Where privacy screens are provided to windows, they must ensure compliance with NCC building codes for minimum daylight or solar access requirements, and natural ventilation.

3D - GREEN INFRASTRUCTURE

RELATED DESIGN PRINCIPLES:

Design Principle 1: Place and context Design Principle 3: Aesthetics and appearance Design Principle 4: Greening the grey

Green infrastructure refers to the landscape zones of a site not built upon containing deep soil for tree planting. It excludes impervious surface areas including car parks, roof areas and driveways.

Green infrastructure in the form of deep soil zones and permeable paving has important environmental benefits such as allowing the infiltration of rainwater into the water table and reducing stormwater runoff. Deep soil zones also have the benefit of promoting healthy growth of large trees with canopies which assist in reducing heat loads in urban environments. Providing sufficient deep soil zones also assists in reaching the urban tree canopy cover targets for greater Sydney Region by 2056 referred to in the Draft Greener Places Design Guide.

Landscape zones can also provide benefit in the form acoustic and visual buffers and when incorporated early in the design process can provide improved outcomes for the streetscape and local context.

Landscaped Area: Area of a soil within a development used for growing plants, grasses and trees, but does not include any building, structure or hard paved area.

Deep Soil Zone: An area of undisturbed soil within the development site with no structures or services below, is unimpeded by buildings, structures or hard paving, and has a minimum dimension as defined by the design criteria.

Permeable Paving: A porous urban surface composed of open pore pavers, concrete or asphalt that allows water to infiltrate into the soil or is filtered back into the drainage system.



FIG. 3D.4 Deep Soil Zones



Calculation of landscaped area.



FIG. 3D.2 Planting within parking areas shades hardstand and reduces the urban heat island effect.



FIG. 3D.3 Tree planting rates are reduced for Type A Retail, and should be distributed to maintain sightlines to signage while providing shade

OBJECTIVE

Objective 3D-1

Landscaped areas provide shade, acoustic and visual buffers to main roads, permeable surfaces for stormwater, and attractive additions to at times utilitarian structures.

DESIGN GUIDANCE

	Locate landscaped areas in positions that provide the greatest benefit to the subject site, the public domain, and neighbouring properties - particularly if these are residential properties. Provide larger, consolidated areas of landscaping rather than long narrow strips, to enable greater varieties of planting, larger plants, and denser screening. Preferably at the front and rear of the site. Use permeable paving in place of hardstand where possible to reduce stormwater runoff and overland flow. Existing significant trees as defined by the local council DCP and landscape features are to be identified, retained, and protected during construction. To reinforce local character assist in the regeneration of local microclimates., the landscape design should use local indigenous plants where possible.	3D-1.1 3D-1.3 3D-1.4	A B C D E F A lan prepa with the best of the prepared of the p	num landscap rovided in acco FREE STANDING 15% 15% 15% 15% 15% dscape maintr ared for the de the CDC. ing significant council DCP a i dentified, ret g construction gnificant trees two trees, or f ol plan (DCP) never is highen	INFILL SITE 5% 5% 10% 5% 5% 10% enance plan evelopment trees as de and landsca ained, and h. Any remoc have been the precinc: / council re	ble areas th the tab MI 1.5 1.5 1.5 1.5 1.5 1.5 1.5 3m n is to be and inclu- protecter wed moor replaced t develop placeme	a are to ble: N DIM im im im im im im im im im im
			which	level is night	l•		
	Locate landscaped areas and tree plantings in positions where they provide the greatest amount of shade to communal areas, building facades and roofs, parking, and other hardstand areas. Visibility of signage is an important consideration for retail uses and other business services. Position trees to maintain visibility of signage, and select trees species that may be pruned to maintain visibility over, but still provide shade. Landscaped areas and plant selections should not obscure building entries from the public domain.	3D-2.1 3D-2.2	Land boun of tre fronta heigh 2m w deve Wher lands car s provi follow NO. 0 TREE A - R B - B C - 0 D - S E - S F - D	scaped areas daries are to b es planted at age that are ca it of at least 80 ithin 2 years of lopment. The there is on g scaped space pace and plan ding tree shall ving rates: DF PARKING E SPACE: TOF PARKING E SPACE: TOF PARKING E SPACE: TOF PARKING E SPACE:	at side and be planted v 3m interval apable of ac m at maturi of the occup grade car pa the equival ted with or be provide SPACES F FRONT 10 5 5 5 5 5 5 5	rear with a sp s along t chieving ty and at bation of arking, a ent size o le shade d at the OR EVE SIDE / REAR 5 5 5 5 5 5 5	ecies hat a least the of one RY <u>MIN</u> <u>DIA</u> 9 12 12 12 12 12 12 12
-	Deep soil zones should be located to retain existing significant trees and to allow for the development of healthy root systems, providing anchorage and stability for mature trees.	3D-3.1	Deep minin MINI MIN.	o soil zones are num requirem MUM DIMEN % OF LAND	e to meet th ents: SION: 3m SCAPED A	ne followi REA: 50º	ing %

Objective 3D-2

Trees provide shade to hardstand areas, building facades, and parking areas; reducing the heat island effect, and mechanical cooling requirements for buildings.

Objective 3D-3

- Deep soil zones provide areas on the site that allow for and support healthy plants and trees,

DESIGN CRITERIA

3E - PUBLIC DOMAIN INTERFACE

RELATED DESIGN PRINCIPLES:

Design Principle 1: Place and context Design Principle 2: Integration and connection

The public domain interface is the relationship between the development, its private space at the street edge and the public domain. The careful consideration of this interface can allow a development to make a positive contribution to the streetscape, local context and public domain. In contrast, a poor public domain interfaces such as large, high blank walls or fences, mirrored glazing can negatively impact the public domain and have potential impact on safety.

Key components to consider when designing the public domain interface include building entries, fences and walls, changes in levels, services locations, and planting. Elements of the public domain interface contribute to the effective passive surveillance of the area through establishing clear sight lines and the use of effective lighting.

Active Frontage: Street frontages where there is an active visual engagement between those in the public domain and those within the development. Active frontages enliven streets, increase passive surveillance, and make opportunities for building entries and lobbies.

Passive Surveillance An environment where people can see and be seen through casual observation. Passive surveillance is an important component of public domain safety.



Street Activation and Passive Surveillance.



FIG. 3E.2

Building entries are visible from the public domain.



Example of active primary street frontage with clearly defined building entries.

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OBJECTIVE	DESIGN GUIDANCE	DESIGN CRITERIA	
Objective 3E-1			
The development provides activation and passive surveillance to public streets and public open space.	 Ground floor engagement (shopfronts, retail showrooms, clear glazed walls and windows to offices) provide activation and passive surveillance to the street and public domain, Windows from the building provide passive surveillance of the public domain, and external areas of the development Driveways, loading, and service entries are excluded from active frontage and should be located away from entry lobbies, and active frontages. Security grills may only be fitted internally behind shopfront glazing, are fully retractable, and minimum 50% transparent when closed. Building types with limited activation, employees, or visitors (eg data centres, and storage facilities) must still provide dedicated pedestrian entries from the public domain. i.e. A sole entry off a drive way or loading area is not acceptable 	3E-1.1 3E-1.2 3E-1.3 3E-1.4	Provide a combined length of active street frontage, building entries, and clear glazing to active uses behind in the following ratios: STREET FRONTAGE PRIMARY SECONDARY A - RETAIL 50% 25% B - BUSINESS 50% 25% C - OFFICE 50% 25% D - STORAGE 25% 10% E - SHOWROOM 80% 40% F - DATA CENTRE 20% 10% A dedicated pedestrian entry point is provided separate to any driveway or loading area. All publicly accessible external areas of the site are visible from within the building Ground floor uses and lobbies are to have clear, transparent glazing with a predominately unobstructed view from the exterior to a depth of 6m into the interior of the building.
Objective 3E-2			
Building entries provide employees, customers, and visitors with a welcoming, accessible, entry point.	 Building entries should be accessible, clearly defined, inviting, and visible from the public domain. Building entries should provide weather protection in the form of an awning or undercroft of a suitable size for small groups to wait undercover. Building entries should be located on the frontage to the primary street where possible. Where this is not possible, they are visible from the public domain, and clearly sign posted. Accessible pedestrian paths must be provided from boundary to building entry, separate to any vehicular circulation or parking, with marked crossings where pedestrian access crosses any road or driveway. 	3E-2.1 3E-2.2	 Building Entries: are accessible, clearly defined, inviting, and visible from the public domain, Provide weather protection Are located on the primary frontage A dedicated accessible pedestrian path is provided from boundary to building entry.
Objective 3E-3			
Secondary frontages make a positive contribution to the public domain.	 The secondary frontages to corner lots provide a positive contribution to the public domain by providing an active edge to the boundary treatment. 	3E-3.1	The Design Verification Statement is to outline how frontages to secondary roads are considered as active edges to the public domain and are integrated with the design.
Objective 3E-4			
Building services and essential equipment are integrated with the building design.	 Service enclosures, cupboards, and doors that address the public domain, should be integrated with the design of the building. Locate service entries, and loading areas away from main building entries and lobbies. 	3E-4.1	 Locate essential services and equipment required to be accessible from the public domain: To the relevant NCC building code and/or Australian Standard/s On the secondary street frontage where possible and permissible, In services enclosures and cupboards integrated with the building design.





3F - BUILT FORM AND MASSING

RELATED DESIGN PRINCIPLES:

Design Principle 5: Resilient buildings

Design Principle 3: Aesthetics and apperance

The Building Envelope Development Standards and Design Criteria set out the primary controls that will determine the available envelope within which a building may be placed.

Floorspace

Floorspace is the measurement of gross floor area (GFA) and calculation is defined in the SEPP. Varying building uses can have a significant influence on the overall GFA achievable on a site.

Height

Building heights can be measured in storeys and in metres above the natural ground level. Heights in storeys are a useful guide to the character and scale of a development unaffected by ceiling heights which can vary significantly across development types. Building height in metres is important component in defining the overall building envelope and relative setting within a context.

Where a maximum height is identified for the site under the relevant LEP, that will apply.

Setbacks

Setbacks govern the distance of a building from property boundaries. Setbacks vary according to a building's context and typology and are a means of reinforcing or establishing the character of an area.



Long buildings are broken down into smaller elements.



Long buildings are broken down into smaller elements.









FIG. 3F.4 Measurement of building height.



-IG.	31.5	2		
Prim	arv	Road	Setba	ack.

NOTE ALL DRAFT	ТҮРЕ					
	A - Retail	B - Office	C - Office	D - Showroom	E - Storage	F - Data
DEVELOPMENT STANDARD	SEPP CODES -	tbc				
Maximum Floorspace	10,000m ²	10,000m ²	10,000m ²	5,000m ²	10,000m ²	10,000m ²
Height of Building (Where no existing LEP or DCP Height Control)	6m	14m	22m	9m	30m	30m
Number of Storeys - Max	5	5	5	5	5	5

	FREE STANDING SITE		INFILL SITE	INFILL SITE	
Setbacks	Mid Block	Corner Site	Mid Block	Corner Site	
Primary Road Setback*	Max 21m	Max 21m	Max 3m	Max 3m	
Secondary Road Setback*	-	Max 21m	-	Max 6m	
Side Setback 1*	Max 21m	Max 21m	Max 6m	Max 21m	
Side Setback 2*	Max 21m	Max 21m	Max 3m	Max 3m	
Rear Setback*	Min 9m	Min 9m	Min 9m	Min 9m	

Note: Minimum Council DCP setbacks apply.

OBJECTIVE	DESIGN GUIDANCE	DESIGN CRITERIA
Objective 3F-1		
Buildings reinforce street edges and urban corners	 Street setbacks should be limited to reinforce street edges and corners and establish desired future character of the street and area. Rear setbacks are to be provided to provide separation to adjoining lots and provide opportunity for landscaped zones. In instances where neighbouring developments align with the desired future character as defined by the controls, developments should respond to existing established setbacks. 	3F-1.1 Where possible within the setback controls align building with the predominant established built form alignments, or align to the average of the adjacent setbacks.
Objective 3F-2		
Large buildings and sites contribute to a finer grained urban environment through built form articulation and through site links.	 Large buildings should be broken up or articulated to reduce overall perceived scale and provide architectural interest. Building facade should provide a balanced composition of elements including solid and void and have an appropriate scale and proportion to the streetscape. Through site links should be considered where it would provide a positive contribution to the public domain. Active uses (eg office areas, amenities, circulation stairs) at ground level enliven facades and street frontages 	 3F-3.1 The maximum length of unbroken building form is 50m or smaller if specified in relevant council DCP. On sloping sites, built form steps with the slope of the land at breaks in building form. 3F-3.2 Specific controls for Typology D - Storage Facility, and Typology F Data Centre: Locate active uses along street frontages to enliven facades. Detail how the facades of the building have been designed to add visual interest through the building structure, facade design, and signage integration.





DESIGN CRITERIA - THE DESIGN OF THE DEVELOPMENT

3G - SITE ACCESS

RELATED DESIGN PRINCIPLES:

Design Principle 1: Place and context Design Principle 2: Integration and connection

Building entries provide a connection with the public space and an address for a building. Access for pedestrians, cyclists and vehicle should be safe, legible and equitable. The design and their integration with the overall building architecture and landscape contribute to the identity and character of the streetscape.

Vehicle access points can have a significant impact on the streetscape, site layout and building design. Early consideration within the planning process potential conflicts with traffic patterns, streetscape elements and building users to be considered.

Good pedestrian access delivers high quality, safe and pleasant walking environments along the street and into the development. For larger sites in particular sites clear and dedicated pedestrian access integrated throughout the site including between parking and the building is essential.



FIG. 3G.1

Safe pedestrian access from street and carparking to building entry.



FIG. 3G.2

Access to loading and service areas.



Off street parking and loading access for corner sites.

OBJECTIVE	DESIGN GUIDANCE	DESIGN CRITERIA
Objective 3G-1		
Provide safe and equitable site access for pedestrians, cyclists, and vehicles.	 Dedicated safe and direct pedestrian access should be provided that is not in conflict with vehicular access and circulation. Pedestrian access should be equitable and legible and should form a primary entry from both the street and carpark. Safe and legible access to staff and visitor bicycle parking should be provided that is not in conflict with vehicular access and circulation. 	 3G-1.1 Provide all access to off-street parking, loading and servicing areas to AS 2890. 3G-1.1 Provide accessible pedestrian path from street front boundary to building entry, separated from any vehicular circulation or parking. 3G-1.1 Provide a marked crossing where pedestrian access crosses any road or driveway. 3G-1.1 Provide accessible pedestrian circulation path from all car parking areas to building entry. Provide dedicated circulation path, separate to any road or drive, adjacent building from carpark to building entry.
Objective 3G-2		
The location of vehicular access points is a considered part of the urban design of the development.	 Vehicular access should be located to minimise impact on the streetscape and surrounding local context. 	3G-2.1 Where a development has a frontage to a Classified Road and a secondary frontage to a local road the local road is the preferred vehicular entry point.
Objective 3G-3		
Basement parking and servicing areas are located and designed to minimise their impact on the public domain.	 The impact of basement parking, entries and loading areas should be designed to minimise the impact on the streetscape. Loading areas should be located to the rear of the site to minimise the impact on the streetscape. The size and layout of loading areas should be appropriate for the use and ongoing operation of the development. Clear delineation of the loading areas should be provided to ensure safe ongoing operation. On larger sites, dedicated service vehicle circulation may be considered to ensure safe movement of pedestrian, vehicles and service vehicles. 	 3G-3.1 Locate basement entries off secondary road where available. 3G-3.2 Sufficient area is to be provided for the safe manoeuvring of large trucks and service vehicles as required for operation of the development. 3G-3.3 Loading Areas: Access off secondary road where available Free Standing Sites: Locate loading areas at rear of site, behind building line. Infill Sites: Locate loading areas at rear of site, behind building line where possible. Where not possible, locate loading areas including manoeuvring areas for vehicles within building.
Objective 3G-4		
Controls for specific Typologies	 Site access and address should consider the specific use and requirements of building. 	3G-4.1 Type A - Retail. Where the retail development is a specialised retail premise (bulky goods retailer) and a dedicated pickup area is provided, it is to be located behind the front building line adjacent to the building to enable easy pickup of goods.

	DESIGN GUIDANCE	DESIGN	CRITERIA
5,	 Dedicated safe and direct pedestrian access should be provided that is not in conflict with vehicular access and circulation. Pedestrian access should be equitable and legible and should form a primary entry from both the street and carpark. Safe and legible access to staff and visitor bicycle parking should be provided that is not in conflict with vehicular access and circulation. 	3G-1.1 3G-1.1 3G-1.1 3G-1.1	 Provide all access to off-street parking, loading and servicing areas to AS 2890. Provide accessible pedestrian path from street front boundary to building entry, separated from any vehicular circulation or parking. Provide a marked crossing where pedestrian access crosses any road or driveway. Provide accessible pedestrian circulation path from all car parking areas to building entry. Provide dedicated circulation path, separate to any road or drive, adjacent building from carpark to building entry.
s ne	 Vehicular access should be located to minimise impact on the streetscape and surrounding local context. 	3G-2.1	Where a development has a frontage to a Classified Road and a secondary frontage to a local road the local road is the preferred vehicular entry point.
9	 The impact of basement parking, entries and loading areas should be designed to minimise the impact on the streetscape. Loading areas should be located to the rear of the site to minimise the impact on the streetscape. The size and layout of loading areas should be appropriate for the use and ongoing operation of the development. Clear delineation of the loading areas should be provided to ensure safe ongoing operation. On larger sites, dedicated service vehicle circulation may be considered to ensure safe movement of pedestrian, vehicles and service vehicles. 	3G-3.1 3G-3.2 3G-3.3	Locate basement entries off secondary road where available. Sufficient area is to be provided for the safe manoeuvring of large trucks and service vehicles as required for operation of the development. Loading Areas: - Access off secondary road where available - Free Standing Sites: Locate loading areas at rear of site, behind building line. - Infill Sites: Locate loading areas at rear of site, behind building line where possible. Where not possible, locate loading areas including manoeuvring areas for vehicles within building.
5	 Site access and address should consider the specific use and requirements of building. 	3G-4.1	Type A - Retail. Where the retail development is a specialised retail premise (bulky goods retailer) and a dedicated pickup area is provided, it is to be located behind the front building line adjacent to the building to enable easy pickup of goods.



DESIGN CRITERIA - THE DESIGN OF THE DEVELOPMENT

3H - PARKING

RELATED DESIGN PRINCIPLES:

Design Principle 1:	Place and context
Design Principle 2:	Integration and connection
Design Principle 4:	Greening the grey

Car parking can have significant impact on site planning, landscape and building design. On site parking can be on-grade, underground or above ground within a structure. The type and configuration of parking will usually be an outcome of site constraints, lot size, local context, feasibility and regulatory requirements. The extent and type of parking will also be influenced by the building use and associated parking requirements varying across building types.

Building typologies within this design guide are commonly defined by large areas of a site dedicated to on-grade parking. Successful integration of on-site parking does not dominate the built form or streetscape and is integrated into the overall building design or landscape.

Alternative forms of active transport such a bicycle parking should also be considered within the design of parking.







FIG. 3H.2

Car parking in front of building line is discouraged.



OBJECTIVE	DESIGN
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01.1 . . . **ALL** 4

GUIDANCE

 Large areas of on grade car parking between the street and the building should be avoided. On grade car parking should be located to side or rear of building where possible. Where parking in front of the building is a requirement, depth to be limited to maintain a close connection between the street and the building entry. 	3H-1.1	 Parking rates are determined by taking the lowest of: the rates specified in the Guide to Traffic Generating Developments (RTA 2002), any maximum parking rates or lower minimum rates specified by local controls, maps or guidance
 Light coloured paving materials or permeable paving systems should be considered to reduce the surface temperatures of large areas of on-grade parking. Carparking layouts should be well organised, and use confident temperatures areas for a standard be well organized. 	3H-1.2	 On grade parking in front of building line is: Limited by prescribed setbacks in the Development Standards. Maximum one double loaded parking aisle.
an emcient, logical structure.	3H-1.3	Landscaping and trees are provided within parking areas to Design Criteria 3.D-2.
	3H-1.4	Trees within carparking areas should be planted in an alternating offset arrangement to maximise shade coverage.
	3H-1.5	Carparking areas within the building envelope are screened by active uses to a minimum depth of 6m from the facade for any facade visible from the street or public domain.
 Basement and underground carparking should be designed to minimise the impact on the streetscape. Basement parking protruding above the ground level should be integrated into the building and limited in 	3H-2.1	Basement parking must not protrude more than 1m above ground level. Any basement parking above ground level is to be screened to block views into the basement area.
height to not negatively impact the streetscape or prevent equitable access of the building.	3H-2.3	Natural ventilation must be provided to basement parking that has external walls above ground level.
	3H-2.4	Ventilation grills, openings, and screening devices must be integrated into the architectural design, and screened by landscaping where possible.
 Carparking should provide dedicated, safe and legible pedestrian circulation. Carparking should incorporate crime prevention through environmental design (CPTED) principles to 	3H-3.1	Safe pedestrian routes through carparking areas to dedicated pavements and pathways should be provided and clearly marked with line markings and protected by bollards
increase safety. This may include consideration of layout, orientation, landscaping, surveillance and lighting.	3H-3.2	where required. Carparking areas to be well lit and comply with all relevant Australian Standards
 Secure covered bicycle parking facilities should be conveniently located for staff and visitors. Where suitable, end of trip facilities should be 	3H-4.1	Secure bicycle parking to DCP rates are provided for staff that is easily accessible from the public domain and building entry.
provided to encourage active transport options.	3H-4.2	Visitor bicycle parking is provided to local council DCP rates near building entries in a location visible from the public domain.

Objective 3H-1			
The visual and environmental impacts of on grade car parking should not dominate the streetscape and should be mitigated through siting and landscaping.	 Large areas of on grade car parking between the street and the building should be avoided. On grade car parking should be located to side or rear of building where possible. Where parking in front of the building is a requirement, depth to be limited to maintain a close connection between the street and the building entry. 	3H-1.1	 Parking rates are determined by taking the lowest of: the rates specified in the Guide to Traffic Generating Developments (RTA 2002), any maximum parking rates or lower minimum rates specified by local controls, maps or guidance
	 Light coloured paving materials or permeable paving systems should be considered to reduce the surface temperatures of large areas of on-grade parking. Carparking layouts should be well organised, and use 	3H-1.2	 On grade parking in front of building line is: Limited by prescribed setbacks in the Development Standards. Maximum one double loaded parking aisle.
	an efficient, logical structure.	3H-1.3	Landscaping and trees are provided within parking areas to Design Criteria 3.D-2.
		3H-1.4	Trees within carparking areas should be planted in an alternating offset arrangement to maximise shade coverage.
		3H-1.5	Carparking areas within the building envelope are screened by active uses to a minimum depth of 6m from the facade for any facade visible from the street or public domain.
Objective 3H-2			
The visual and environmental impacts of basement and underground car parking should be minimised.	 Basement and underground carparking should be designed to minimise the impact on the streetscape. Basement parking protruding above the ground level should be integrated into the building and limited in height to not negatively impact the streetscape or prevent equitable access of the building. 	3H-2.1	Basement parking must not protrude more than 1m above ground level. Any basement parking above ground level is to be screened to block views into the basement area.
		3H-2.3	Natural ventilation must be provided to basement parking that has external walls above ground level.
		3H-2.4	Ventilation grills, openings, and screening devices must be integrated into the architectural design, and screened by landscaping where possible.
Objective 3H-3			
Carparking areas are safe and secure	 Carparking should provide dedicated, safe and legible pedestrian circulation. Carparking should incorporate crime prevention through environmental design (CPTED) principles to increase safety. This may include consideration of layout, orientation, landscaping, surveillance and lighting. 	3H-3.1 3H-3.2	Safe pedestrian routes through carparking areas to dedicated pavements and pathways should be provided and clearly marked with line markings and protected by bollards where required. Carparking areas to be well lit and comply with all relevant Australian Standards.
Objective 3H-4			
Encourage active transport options with parking facilities for bicycles.	 Secure covered bicycle parking facilities should be conveniently located for staff and visitors. Where suitable, end of trip facilities should be provided to encourage active transport options. 	3H-4.1 3H-4.2	Secure bicycle parking to DCP rates are provided for staff that is easily accessible from the public domain and building entry. Visitor bicycle parking is provided to local council DCP rates near building entries in a location visible from the public domain.

FIG. 3H.3 Offset arrangement of tree planting in carparking areas.



FSI	GN	CR	TE	RΙΔ
EOI	GIN	CUL		NIA

DESIGN CRITERIA - THE DESIGN OF THE DEVELOPMENT

3I - AMENITY

RELATED DESIGN PRINCIPLES:

Design Principle 3: Design Principle 4: Greening the grey Design Principle 5: Resilient buildings

Design Principle 2: Integration and connection Aesthetics and appearance

Amenity encompasses any desirable or useful feature of a building or place. Various gualities of a design can contribute and enhance the amenity of the building for users of the space. This may include design, access to sunlight, spatial qualities, facilities and services.

Daylight and Solar Access

Daylight and solar access is important in not only reducing reliant on artificial lighting and heating but also beneficial to user amenity through pleasant conditions for building. Solar access is when a room or space receives direct sunlight without obstructions from other buildings or natural features, excluding trees. Daylight consists of sunlight and diffused light from the sky. Both daylight and solar access change with the time of day, season and weather conditions. Daylight requirements are not only relevant to an office building typology but also office spaces within other building types for example office areas attached to a storage facility.

Ceiling Height

Ceiling height affects the amenity of a dwelling and the perception of space. Measured from finished floor level to finished ceiling level ceiling heights are also directly linked to daylight access of a space or room. Well designed spaces may also vary ceiling heights to respond to a spaces use, function or design intent.

Communal Open Space

The inclusion of communal open space in workplaces is an important amenity resource that provides staff and employees with recreational space benefiting from natural light and ventilation. Communal open spaces provide opportunities for social interaction among staff and employees with the design, scale and location of the space varied depending on the building use and context.



FIG. 3I.1 Maximum depth from facade to workspaces is limited to allow good daylight access.



FIG. 31.2 Minimum ceiling heights.



FIG. 3	1.5	
Deep	Soil Z	Zones.

OBJECTIVE	DESIGN GUIDANCE	DESIGN CRITERIA
Objective 3I-1		
Commercial buildings provide workplaces or office spaces within a building with good daylight and solar access.	 Workplaces should be designed and configured to maximise equitable access to daylight. Enclosed spaces and rooms should be limited along the building perimeter to maximise natural daylight access. Site constraints may require reduced building depths to meet good daylight and solar access amenity. 	 3I-1.1 Open office areas, workspaces, and offi areas within a building are located no m than 12m from building facades providinatural daylight. 3I-1.2 All spaces within the building comply w NCC Part F4 Light and Ventilation.
Objective 3I-2		
Ceiling heights allow for habitable areas with a high degree of amenity.	 Ceiling heights should be designed to allow for sufficient daylight penetration into the room or space. Ceiling heights should be proportional to the room or space and use. The vertical stacking of wet areas should be considered as a way of achieving maximum ceiling heights to primary use spaces. 	 3I-2.1 The following minimum ceiling heights a provided: 3.6m: Ground Floor retail, workspaces, accessible to the public, lobbies 2.7m: Upper Levels - Workspaces, offic areas accessible to the public 2.4m: Bathrooms, kitchens, storage are circulation
Objective 3I-3		
Workplaces provide accessible open space for staff and employees.	 The size of open space should be proportional to the size of the building, site and building population. Communal open space should be consolidated into a well design, easily identified and usable area, and where practical co-located with landscaped areas 	 3I-3.1 Provide 2.5% of the site area as commu open space with furniture and shading. 3I-3.2 Open space is to have a minimum dime of 3m and receive 2 hours of direct sunl
	 Communal open space should be located and designed to benefit from daylight and natural ventilation. 	between the hours of 9am - 6pm.
	 Where practical, communal open space should be located in proximity to communal kitchen facilities. 	
	 Communal open spaces should not be located where it would have a negative impact on the local context. 	



3J - APPEARANCE AND MATERIALS

RELATED DESIGN PRINCIPLES:

Design Principle 1:	Place and o
Design Principle 3:	Aesthetics
Design Principle 5:	Design resi

context and appearance ilient and diverse places

Architectural form is a key element defining the way in which a building is viewed from a distance. An balanced composition of built form allows a building to provide a contribution to the local area and streetscape.

Architectural form includes the shape and proportion of a building and considers all dimensions of the building mass including roof form.

Finer details of architectural form include articulation and facade design which are important in contributing to the buildings visual interest and breaking up the scale of a building.









Rooftop plant is acoustically and visually screened.



	Architectural form is defined balanced composition of elements and makes a posit contribution to the urban environment.
und level is located behind the	
any and visually screened.	Objective 3J-2
	Advertising and signage is integrated into the architectu

OBJECTIVE

Objective 3J-1	
Architectural form is defined by a balanced composition of elements and makes a positive contribution to the urban environment.	 Developments should consist of a considered form and urban design that provides a positive contribution to the local area and streetscape. The aesthetics and composition of the propose buildings are to be considered in relation to the surrounding buildings and context. The design of the building should exhibit good proportions and a balanced composition of elethat reflects the building's use, its structure, a internal planning.
Objective 3J-2	
Advertising and signage is integrated into the architecture	 Free standing signage is to be considered as a the architectural design of the development. Signage on buildings must be integrated into architecture and considered as a positive corr of the architectural design.
Objective 3J-3	
Plant and equipment is screened and screening elements are integrated into the architectural design	 Screening is to be considered as a part of the architectural design and integrated into the ov design of the building. Screening of plant and equipment elements sl a secondary preference, with primary emphase locating elements out of view from the public of the pu
Objective 3J-4	
Material selection contributes to the design of an aesthetically pleasing, durable and resilient commercial building.	 Materials should be robust to create a long lass low maintenance environment Materials should be selected with an understat the effects of weathering to ensure a high quat that endures for the life of the building. Materials should be selected for their low embed energy and potential for future re-use or recycle.

DESIGN GUIDANCE

- Materials should not be highly reflective to a and the absorption of heat.
- Street walls should be articulated through co texture and materiality to provide scale and definition and pedestrian interest.

FIG. 3J.3 A balanced composition of materials, colours and textures contribute to the building design.





DESIGN CRITERIA

ed built tive osed the ood elements , and	3J-1.1	The Design Verification Statement must outline how the design has been developed, how it responds to the local context, and provides a cohesive and considered design response.
s a part of o	3J-2.1	The Design Verification Statement is to outline how signage has been integrated with the architecture of the building
omponent	3J-2.2	The Design Verification Statement is to outline how free standing signage has been integrated with the site design and local context.
	3J-2.3	Signage is to comply with the Codes SEPP: Subdivision 2 Building identification signs
ne overall	3J-3.1	All plant and equipment is screened from view from the public domain, and any residential or mixed use areas.
should be asis on c domain.	3J-3.2	Ground level plant to be located behind the front building line. Or rooftop plant to be set back from perimeter and screened for visual privacy and to meet acoustic regulations.
lasting and	3J-3.1	The Design Verification Statement is to outline how this has been considered and achieved.
standing of uality finish		
mbodied ycling. avoid glare		
olour, street		

3K - NOISE

RELATED DESIGN PRINCIPLES:

Design Principle 4: Greening the grey Design Principle 5: Resilient buildings

Sites within the subject zones are commonly located near major roads, rail lines, beneath flight paths or near industrial areas which have noise and air quality implications. Similarly land use within the subject zones can also have potential noise and pollution impacts on the adjoining public and private domain.

Incorporation of noise and pollution design considerations can help improve the amenity not only for the buildings users but also the surrounding context.



FIG. 3K.1

Site planning in response to internal and external noise constraints.

OBJECTIVE	DESIGN GUIDANCE	DESIGN CRITERIA
Objective 3K-1		
Noise generated by commercial buildings and uses should not adversely effect the local context.	 It is far more cost effective to install appropriate noise insulation at the design stage, rather than retrofitting it later to a finished building. 	3K-1.1 Any noise generated by the proposed development complies with the acoustic controls in the SEPP (Schedule 8 - Part 4.22)
	 Noise generating sources should be located, orientated and designed to avoid adversely effecting the local context. 	Provide details of noise mitigation measures to meet the SEPP
	 Within a development, where possible provide physical separation between noise pollution sources and building uses that would be negatively affected. 	
	 Consider landscape design as a means of reducing the perception of noise and a filter for air pollution. 	



FIG. 3K.2

Acoustic louvre screening is provided to plant room and equipment.



Acoustic louvre screening should be incorporated into the building architecture.



3L - ENERGY

RELATED DESIGN PRINCIPLES:

Design Principle 4: Greening the grey Design Principle 5: Resilient buildings

Energy efficient design involves managing the thermal performance and energy consumption of a building which can benefit the amenity of the occupants in addition to reducing energy costs.

Passive environmental design principles range from thermal mass, external shading, building orientation, cross ventilation and insulation. Energy efficient design considers sources of energy consumption and generation including energy efficient fittings, photovoltaics and battery storage.



FIG. 3L.1

Shading devices such as awnings are provided to reduce heat loading.



OBJECTIVE	DESIGN GUIDANCE
Objective 3L-2	
Building fabric is designed and constructed to reduce energy consumption	 All Class 2-9 buildings are required to demonst compliance with Section J of the NCC. Energy efficient fittings and appliances should incorporated into the building. Insulate roofs, walls and floors and provide se windows and door openings.
Objective 3L-1	
The building incorporates passive environmental design to reduce energy usage and ongoing costs.	 Avoid dark or mirrored glass as means of reduces heat loading. Incorporate overhangs and share devices such as awnings, blinds and screens. Particularly on north, east and western facing Maximise thermal mass where possible in nor rooms. Use light coloured roofing materials to reduce loading and ongoing energy usage costs.
Objective 3L-3	
Renewable energy sources should be considered in the design of the development.	 Where possible, solar panels should be incorp to reduce energy usage and ongoing costs.

FIG. 3L.2

Example of a light coloured roofing material to reduce heat loading.



Roof mounted photovoltaics should be integrated into the design of the building.



	DESIGN CRITERIA		
Instrate	3L-1.1	Provide a report demonstrating compliance with Section J of the National Construction Code (NCC).	
seals on	3L-1.2	The development aligns with the relevant National Australian Built Environment Rating System (NABERS) targets set by the Design and Place SEPP.	
ducing ading Is.	3L-2.1	The Design Verification Statement must detail how passive environmental design has been incorporated into the development.	
orth facing	3L-2.2	Where not visible from the public domain, light coloured roofing materials with a high Total Solar Reflectance (TSR) of greater than 60% are to be used to reduce heat loading.	
	3L-2.3	North, east, and west facing glazing is shaded by external screens, louvres, or overhangs.	
prporated	3L-3.1	The Design Verification Statement must detail how the solar energy was considered and the proposed system. If solar is not being adopted in the development outline the reasons why.	

3M - WATER

RELATED DESIGN PRINCIPLES:

Design Principle 4: Greening the grey

Water management includes the integration of Water Sensitive Urban Design (WSUD). WSUD is the integration of urban planning with management, protection and conservation. This takes into account all elements of the water cycle including potable water, rainwater, wastewater, stormwater and groundwater. Consideration from design, construction to ongoing use of the building can help achieve a better urban water management outcome.

Implementations can range from initial planning measures such as the maximising of deep soil zones for water infiltration to detailed building design relating to water capture, consumption and and reuse.



FIG. 3M.1

Stormwater can be controlled on-site by use of rain gardens or rainwater tanks.



FIG. 3M.2

Rainwater tanks should be integrated into the building architecture and landscape design



FIG. 3M.3 Example of permeable paving to parking bays.

OBJECTIVE	DESIGN GUIDANCE
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Objective 3M-1

Water sensitive urban design (WSUD) principles are implemented in the design of the site and building.

WSUD should incorporate the following princip

- Protect and enhance natural watercourses a associated ecosystems and ecological proc
- Maintain, protect and/or rehabilitate modifie watercourses and their associated ecosyste ecological processes towards a natural state
- Minimise potable water demand and wastew generation.
- Match the post development runoff to the pr development or natural water runoff regime as possible.
- Mitigate the impacts of development on wat and quantity.
- Mitigate the impacts of development on grou particularly in saline groundwater environme
- Ensure any changes to the existing groundw regime do not adversely impact upon adjoin properties.
- Integrate water cycle management measure landscape and urban design to maximise an
- Minimise the potential impacts of development other associated activities on the aesthetic, recreational and ecological values of receiving
- Minimise soil erosion and sedimentation res site disturbing activities.
- Ensure the principles of ecologically sustain development are applied in consideration of economic, social and environmental values cycle management.

Objective 3M-2	
Flood management systems are integrated with the design	 Porous and open paving materials are encour where suitable to increase water infiltration. Stormwater quantity and quality should be co by use of bioswales, rain gardens, or on-site of tanks where appropriate. Water sensitive urban drainage systems must designed by a suitably qualified professional.
Objective 3M-3	
Water management systems from construction through the life cycle of the development	 An erosion and sediment control plan will out the impacts of construction are mitigated thro construction period
implemented in the design.	 Operation and Maintenance plans ensure that goals of the water management system are m ongoing life of the development, and when th

changes owners, or use.



DESIGN CRITERIA

oles: and their esses. d ems and e. water re as closely	3M-1.1	Locally-harvested rainwater must be the primary source of non-potable water for developments. At least 90% of roof area shall be connected to rainwater storage(s) which supply non- potable water reuse from this source Where non-potable demand within a development site is low, alternative uses for roof water such as landscaping, roof gardens, as well as off-site re-use, should be considered so as to minimise the volume of stormwater discharged to local waterways.
ter quality undwater, ents. vater ing	3M-1.2	Above ground water tanks are integrated into the architecture of the development through material selection or screening. Rainwater tank storage does not contribute to on site detention volume and cannot be used to offset on site detention requirements
es into the nenity. ent and ng waters. ulting from	3M-1.3	Minimise impervious areas that are directly connected to the stormwater system. Runoff from impervious areas such as driveways, paving and rainwater tank overflows should be directed onto landscaped areas designed to accept such flows
able : in water	ЗМ-1.4 ЗМ-1.5	Oil and grease traps as required by building use are located in surface and basement carparks Using plant species native to the Sydney region in water sensitive urban design features and associated landscaping, to avoid spread of weed propagules to downstream
		wetlands.
uraged	3M-2.1	Stormwater design and system to comply with all relevant building codes, Australian Standards, and DCPs.
st be	3M-2.2	OSD tanks are to be located under paved areas, driveways, or in basements
utline how rough the at the	3M-3.1	Prepare an 'Erosion and Sediment Control Plan' and a 'Construction Management Plan' detailing how erosion and sediment control measures will be met.
met in the he site	3M-3.2	An establishment, handover and operation and maintenance plan must be developed and implemented for all water sensitive urban design assets and integrated water cycle management, including rainwater reuse assets, for the life of the asset.

3N - WASTE

RELATED DESIGN PRINCIPLES:

Design Principle 4: Greening the grey

Design Principle 2: Integration and connection Design Principle 3: Aesthetics and appearance

The minimisation and effective management of waste contributes to the visual and physical amenity of the building in addition to limiting any potential harmful impacts on the environment.

Waste minimisation is applicable to all stages of the building's life cycle ranging from waste generated throughout construction to ongoing use of the building.

Waste management should be considered early in the design process. This includes considering the safe storage and collection of waste and recycling. Storage and collection of waste can also significant negative impacts on the amenity of the building, public and private domain.



FIG. 3N.1

Waste collection and storage areas located to the rear of the building.





•	OBJECTIVE	DESIGN GUIDANCE	DESIGN CRITERIA
	Objective 3N-1		
	Waste and recycling storage areas are provided to meet the requirements of the site use.	 Ensure adequate space is provided to allow for the colocating of recycling and waste bins for the use by building occupants. On-site collection for larger sites should consider seperate and dedicated access and circulation for waste collection vehicles. 	 3N-1.1 Provide waste rooms, recycling storage areas, and bulky item storage areas to DCP controls. 3N-1.2 Refer to the local councils waste generation guidelines for specific volumes and types of waste specific to the use case of the proposed development. 3N-1.3 All Waste storage areas are to have water supply for cleaning, and a solid floor graded to a floor waste (connected to the sewer). 3N-1.4 Waste rooms within buildings or in basements are to have dedicated ventilation and fresh air supply.
	Objective 3N-2		
	Waste and recycling storage areas are integrated with the site planning and building design.	 Temporary storage of bulky items should be provided in an area that is not visible from the street. If rear lane or secondary road access is available and is suitable for waste collection, this is preferable to collection from the street frontage. Waste collection should be designed to minimise impacts on the public and private domain and building access. Waste storage facilities should be designed to minimise impacts on the streetscape, building entries and the public domain. 	 3N-2.1 Waste storage areas are to be screened from view from the public domain, residential and mixed use areas, and carparking areas. 3N-2.2 Waste storage areas and collection points are to be located to the rear of the building or within a basement. 3N-2.3 Waste collection points must be located onsite and must be: be screened from view from the public domain, have a height no greater than 1.3m if forward of the building line, be located on a surface with a gradient less than 1:20, not require access through a security door or gate (unless this is permitted by council's waste policy), have a path that connects the collection area to the street boundary with a gradient less than 1:8 and free of steps to all for the transfer of bins to the collection vehicle
	Objective 3N-3 Byproducts of the commercial operation on the site are disposed of correctly and lawfully.	 Byproducts of commercial operation on sites should not adversely effect the local context. 	 3N-3.1 Provide a statement confirming compliance with all NSW Waste Legislation and regulations including: Protection of the Environment Operations Act 1997 (POEO Act) Protection of the Environment Operations (Waste) Regulation 2014 Waste Avoidance and Resource Recovery Act 2001 (WARR Act)



30 - SAFETY

RELATED DESIGN PRINCIPLES:

Design Principle 1: Place and context Design Principle 5: Resilient buildings

Design Principle 2: Integration and connection

Crime prevention through environmental design (CPTED) seeks to influence the design of buildings and places to lessen or prevent the incidence of crime. The implementation of CPTED elements must be balanced against other design objectives.

The State Government has prepared guidelines under S4.15 of the Environmental Planning and Assessment Act 1979 as part of a broader approach to reducing crime through better design.

The four principles of CPTED as outlined in the NSW Police document 'Safer by Design' are:

Natural surveillance

Natural surveillance is achieved when normal space users can see and be seen by others. This highlights the importance of building layout, orientation and location; the strategic use of design; landscaping and lighting - it is a by-product of wellplanned, well-designed and well-used space.

Access control

Access control treatments restrict, channel and encourage people and vehicles into, out of and around the development. Way-finding, desire-lines and formal/informal routes are important crime prevention considerations. Effective access control can be achieved by using physical and symbolic barriers that channel and group pedestrians into areas, therefore increasing the time and effort required for criminals to commit crime.

Natural access control includes the tactical use of landforms and waterways features, design measures including building configuration; formal and informal pathways, landscaping, fencing and gardens.

Territorial reinforcement

Territorial Re-enforcement uses actual and symbolic boundary markers, spatial legibility and environmental cues to 'connect' people with space, to encourage communal responsibility for public areas and facilities, and to communicate to people where they should/not be and what activities are appropriate.

Space management

Space/Activity Management strategies are an important way to develop and maintain natural community control. Space management involves the formal supervision, control and care of the development. All space, even well planned and welldesigned areas need to be effectively used and maintained to maximise community safety. Places that are infrequently used are commonly abused. There is a high correlation between urban decay, fear of crime and avoidance behaviour.



FIG. 30.1

Passive surveillance is provided to and from the development.

PUBLIC SEMI-PUBLIC

FIG. 30.2

Landscape design does not hinder passive surveillance opportunities.



FIG. 30.3 Example of on-grade carpark lighting.

OBJECTIVE	DESIGN GUIDANCE	DESIGN CRITERIA					
Objective 30-1							
Effective passive surveillance is integrated into the development to discourage criminal and anti social behaviour.	 Passive surveillance should be provided in the form of ground floor activation and glazed walls and windows to active frontages. Building uses should be distributed to maximise their contribution to passive surveillance of important places. The landscape design should not hinder passive surveillance opportunities. Site planning and landscape design should not include blind corners or concealed entries. Provide will lit external areas that are accessible to the public or private open space during business hours of operation. 	30-1.1 30-1.2 30-1.3	Passive surveillance is provided in the f ground floor activation or glazed walls windows to all street frontages. Public and private open spaces are we and comply with all relevant Australian Standards. The building and urban design does not include any blind corners or alcoves the facilitate concealment or hiding.				
Objective 30-2							
The integration of access control principles to attract, channel or restrict the movement of people helps to minimise opportunities for crime.	 Provide fencing or or barriers to restrict access to private or unsafe areas (eg. areas where machinery or commercial vehicles are operated) Provide fencing or barriers to prevent access to secure areas outside of business hours. 	30-2.1 30-2.2	Public access is restricted to areas uns unsuitable for public access in the form fencing or barriers. Public access is restricted to areas not from the public domain outside of busin hours.				
Objective 30-3							
Establish ownership of public space through territorial reinforcement.	 Provide well designed public areas that create a sense of ownership. Open spaces should incorporate clear transitions and boundaries between public and private. Ground floor mixed uses encourage a broader range of occupant and users and can reinforce ownership of public open space. 	30-3.1	The Design Verification Statement is to how this has been considered and achi				
Objective 30-4							
Provide well design public spaces that are attractive, well maintained and well used.	 Consider the integration of robust and durable materials in public spaces to ensure well maintained spaces into the future. Public space should be designed to ensure the CPTED principles can be sustainable and maintained, including the maintenance of spaces in good repair and tidiness. 	30-4.1 30-4.2	Materials in publicly accessible spaces robust and durable. The Maintenance plan details how publ accessible areas are maintained and re				



APPENDIX A: TYPOLOGY ANALYSIS





TYPOLOGY ANALYSIS

PURPOSE

The Typology Analysis has been developed to understand current typical development types occurring within each of the Land Use Zones.

The analysis assists in determining an appropriate range of generic development types and characteristics around which the Design Guidelines are formed.

METHODOLOGY

The Typology Analysis follows the following methodology:

- 1. ZONE STUDIES
- Examples of each of the applicable Land Use Zones are mapped in four locations
- Typical uses and urban characteristics are identified and noted.
- Individual sites demonstrating a range of approaches are selected for further analysis.
- 2. EXAMPLE DEVELOPMENT TYPES
- Typical urban and built form typologies representative of the zoning are selected for analysis.
- Key characteristics are noted
- 3. COMPARATIVE ANALYSIS
- Diagrammatic analysis of each example for key urban design characteristics, including: Height, floorspace, parking, and landscape.
- Matrices are prepared to understand similarities, and develop groupings based on urban design characteristics and uses.
- 4. GENERIC TYPOLOGIES
- Generic typologies are determined based on the analysis and grouped according to common characteristics and uses.









SCOPE AND LIMITATIONS

The typology analysis is a desktop review only and based on publicly available information, including the DPIE Spatial Viewer for mapping and aerial photography, and Google Streetview for gound level images.

While an attempt has been made to capture a broad and inclusive set of precedents for analysis, it is limited and not an exhaustive assessment of all possible areas or types.

All dimensions, areas, and figures are indicative and based off aerial photography, and assumptions have been made where available information is inadequate.





LAND USE ZONE LOCATIONS

ZONE STUDIES

- Four example areas of each of the applicable Land Use Zones (B5, B6, B7) have been selected to understand the development types and urban characteristics typical of the zones.
- The locations have been selected to demonstrate a range of applications from metropolitan and regional locations in New South Wales.





LAND USE ZONE STUDIES

ZONE STUDIES

- Four example areas of each of the applicable Land Use Zones (B5, B6, B7) have been selected to understand the typical development types of each.
- Typical uses and urban characteristics are identified and noted.
- For each area, 2 individual sites demonstrating a range of approaches are selected for further analysis.

The thumbnails on this page illustrate the extent of this precedent study, and each page is provided at the end of the Development Typology Analysis.

B5-BUSINESS DEVELOPMENT B6-ENTERPRISE CORRIDOR B7-BUSINESS PARK S4 Price Image: Signed S





DEVELOPMENT TYPOLOGY SUMMARY

ZONE	PRECEDENT	ADDRESS	USE	LOT SIZE	FLOORSPACE	NO. STOREYS	SETBACKS				PARKING	SITE COVER		
							PRIMARY	SECONDARY	SIDE	REAR		ROOF	LANDSCAPED/ TREE CANOPY	HARDSTAND/ UNCOVERED
B5	Bankstown Example 01	1618 Canterbury Road, Punchbowl	Specialised Retail Premises	~22,000mm ²	0m² - 1,000m²	1	40m	n/a	0m	56m	On grade	35%	14%	50%
В5	Bankstown Example 02	1582 Canterbury Road, Punchbowl	Hardware / Building Supplies	~2,100m ²	1,000m ² - 5,000m ²	1	19m	4m	n/a	0m	On grade	30%	19%	50%
B5	Bathurst Example 01	98 Corporation Avenue, Robin Hill	Specialised Retail Premises	~6,400m ²	1,000m² - 5,000m²	2	20m	20m	5m	17m	On grade	37%	5%	58%
В5	Bathurst Example 02	15 Bradwardine Road, Robin Hill	Specialised Retail Premises	~1,900m ²	1,000m ² - 5,000m ²	2	11m	n/a	2m/10m	4m	On grade	47%	2%	51%
В5	Hornsby Example 01	6 Bridge Street, Hornsby	Specialised Retail / Office Premises	~4,800m²	1,000m ² - 5,000m ²	2	3m	3m	13m	n/a	On grade / Below building	63%	10%	28%
B5	Hornsby Example 02	97 Hunter Street, Hornsby	Business Premises / Retail Premises	~840m²	0m² - 1,000m²	2	3m	n/a	0m / 3m	7m	On grade	52%	4%	44%
В5	Nowra Example 01	144 Princess Highway, South Nowra	Specialised Retail Premises	~3,900m²	1,000m ² - 5,000m ²	1	20m	n/a	3m / 11m	2m	On grade	46%	10%	44%
B5	Nowra Example 02	193 Princess Highway, South Nowra	Specialised Retail Premises	~20,000m ²	5,000m ² - 10,000m ²	1	21m	5m / 20m	4m	28m	On grade	40%	27%	33%
B6	Alexandria Example 01	15 Doody Street, Alexandria	Retail Premises / Hardware / Building Supplies / Office Premises	~4,950m²	5,000m ² - 10,000m ²	4	2m	n/a	0m	0m	On grade / Basement	68%	0.5%	31.5%
В6	Alexandria Example 02	51 Bourke Road, Alexandria	Retail Premises / Self Storage	~4,850m²	1,000m ² - 5,000m ²	3	4m	n/a	0m	0m	Covered / Above building	60%	7%	34%
В6	Casula Example 01	361/363 Hume Highway, Liverpool	Specialised Retail Premise	~2,200m ²	0m² - 1,000m²	2	28m	0m	0m	16m	On grade	30%	2%	68%
B6	Casula Example 02	345 Hume Highway, Liverpool	Specialised Retail Premise	~1,200m ²	0m² - 1,000m²	1	8m	14m	0m	0m	On grade	48%	4%	48%
B6	Waitara/Hornsby Example 01	16 James Street, Hornsby	Specialised Retail Premise	~700m²	0m² - 1,000m²	2	0m	Om	0m	0m	On grade	88%	0%	12%
B6	Waitara/Hornsby Example 02	62 Pacific Highway, Waitara	Specialised Retail Premise	~2,800m ²	1,000m ² - 5,000m ²	3	2m	n/a	0m	0m	Below building	88%	3%	8%
В6	Concord Example 01	51 Parramatta Road, Concord	Specialised Retail Premise	~2,250m ²	1,000m ² - 5,000m ²	2	6m	n/a	0m	0m	Above building	69%	5%	26%
В6	Concord Example 02	111 Parramatta Road, Concord	Office Premises	~1,700m ²	1,000m ² - 5,000m ²	3	5m	4m	0m	0m	Basement	81%	5%	14%
B7	Macquarie Park Example 01	64 Talavera Road, Macquarie Park	Office Premises / Professional Suites / Medical Centre	~7,500m ²	1,000m ² - 5,000m ²	2-4	15m	n/a	12-17m	20m	On grade	28%	14%	58%
B7	Macquarie Park Example 02	12-24 Talavera Road, Macquarie Park	Office Premises	~18,000m ²	10,000m ² +	2-5	20-30m	n/a	3-25m	30m	On grade / Basement	31%	24%	45%
B7	Macquarie Park Example 03	4 Eden Park Drive, Macquarie Park	Light Industry / Data Centre	~9,700m ²	10,000m ² +	3	18-26m	n/a	15m / 3m	9m	On grade / Basement	51%	26%	23%
B7	Pymble Example 01	3-5 West Street, Pymble	Warehouse / Self Storage	~3,160m²	5,000m ² - 10,000m ²	2-6	5m	3-4m	0m	0m	Basement	86%	1%	19%
B7	Pymble Example 02	14-16 Saukin Street, Pymble	Office Premises / Warehouse storage	~6,850m²	5,000m ² - 10,000m ²	4-5	8m	n/a	0m / 10m	0m	Basement / Below building	73%	9%	22%
B7	Artarmon Example 01	4 Broadcast Way, Artarmon	Office premises	~4,150m ²	10,000m ² +	1-6	9m	3m	0m	n/a	Basement	71%	10%	19%
B7	Artarmon Example 02	269 Pacific Highway, Artarmon	Warehouse / Storage Facility	~2,150m ²	1,000m ² - 5,000m ²	3	2m	3m	0m	n/a	Basement	89.5%	10%	0.5%
B7	Norwest Example 01	6 Columbia Way, Baulkham Hills	Office Premises / Data centre (TBC)	~8,600m ²	1,000m ² - 5,000m ²	3	23m	n/a	7m / 23m	41m	On grade	24%	44%	32%
B7	Norwest Example 02	26 Brookhollow Avenue, Baulkham Hills	Office Premises / Warehouse	~7,400m ²	1,000m ² - 5,000m ²	2	40m	n/a	15m	36m	On grade	16%	47%	37%


LAND USE ZONE CHARACTER

B5 - BUSINESS DEVELOPMENT

B6 - ENTERPRISE CORRIDOR

B7 - BUSINESS PARK



MAIN ROAD SPECIALISED RETAIL

144 Princes Highway South Nowra

MAIN ROAD

Bankstown

SPECIALISED RETAIL

1618 Canterbury Road

LIGHT INDUSTRY

WAREHOUSE

Bathurst

MAIN ROAD

CAR SHOWROOM

98 Corporation Ave Bathurst

CORNER SITE

6 Bridge Road

Hornsby

OFFICE BUILDING



MAIN ROAD CORNER SITE OFFICE BUILDING

111 Parramatta Road Concord

MAIN ROAD

MAIN ROAD

Concord

AREA

CAR SHOWROOM

51 Parramatta Road

OFFICE BUILDING

LIGHT INDUSTRY

51 Bourke Road

ADAPTIVE REUSE

OFFICE BUILDING

WAREHOUSE

15 Doody Street

Alexandria

Alexandria

Casula

345 Hume Highway

WORKSHOP/MECHANIC





JAXO



BUSINESS PREMISES INFILL DEVELOPMENT

97 Hunter Street Hornsby





BACK BLOCK LIGHT INDUSTRY 16 James Street

Waitara







BUSINESS PARK

24 Talavera Road

Macquarie Park

OFFICE BUILDING

Artarmon

Artarmon

269 Pacific Highway

BUSINESS PARK DATE CENTRE 4 Eden Park Drive

Macquarie Park

BUSINESS PARK

BUSINESS PARK

3-5 West Street

Pymble

STORAGE FACILITY

Norwest



OFFICE BUILDING 6 Columbia Drive





SUMMARY - LANDSCAPE

Summary diagrams illustrating the extent of soft landscaping and tree canopy cover for the selected typical examples selected in each zone. Note: areas are indicative and based of available aerial photographs





BUSINESS ZONE DESIGN GUIDE FOR COMPLYING DEVELOPMENT - DRAFT FOR EXHIBITION AND COMMENT





KEY PROPERTY BOUNDARY BUILDING FOOTPRINT SOFT LANDSCAPING/TREE COVER VEHICLE ENTRY

111 Parramatta Road

DRAFT-WIP

SUMMARY - PARKING

Summary diagrams illustrating the location of parking areas for the selected typical examples selected in each zone. Note: locations are based of available aerial photographs and google streetview.









KEY

PROPERTY BOUNDARY BUILDING FOOTPRINT ON GRADE PARKING BELOW BUILDING PARKING VEHICI E ENTRY LOADING

1:2500

B7

SUMMARY - HEIGHT

Summary diagrams illustrating the height of buildings for the selected typical examples selected in each zone. Note: heights are based off available aerial photographs and google streetview.



ALEXANDRIA 15 Doody Street



ALEXANDRIA 51 Bourke Road

CASULA

BATHURST

15 Bradwardine Road

345 Hume Highway



HORNSBY

6 Bridge Road

CASULA

361 Hume Highway



WAITARA

16 James Street

HORNSBY

97 Hunter Street



62 Pacific Highway

BUSINESS PARK - Generally 3-6 storeys - Some lower scale 1-2 storey buildings PYMBLE MACQUARIE MACQUARIE MACQUARIE PYMBLE PACIFIC HIGHWAY **BUSINESS PARK** BUSINESS PARK **BUSINESS PARK** BUSINESS PARK BUSINESS PARK ARTARMON 3-5 WEST STREET 14-16 SUAKIN STREET 24 TALAVERA ROAD 64 TALAVERA ROAD 4 EDEN PARK DRIVE 4 BROADCAST WAY

BUSINESS ZONE DESIGN GUIDE FOR COMPLYING DEVELOPMENT - DRAFT FOR EXHIBITION AND COMMENT

BENNETT AND TRIMBLE

ARTARMON

269 PACIFIC HWY



KEY

DRAFT-WIP

DRAFT



BUSINESS ZONE DESIGN GUIDE FOR COMPLYING DEVELOPMENT - DRAFT FOR EXHIBITION AND COMMENT

DRAFT-WIP

1:2500

SUMMARY - SITE COVER

Summary diagrams illustrating the site coverage of buildings for the selected typical examples selected in each zone. Note: areas are measured off of aerial photographs



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BENNETT AND TRIMBLE





KEY 0 - 35% SITE COVERAGE 35 - 65% SITE COVERAGE 65 - 100% SITE COVERAGE PROPERTY BOUNDARY VEHICLE ENTRY LOADING

111 Parramatta Road

SUMMARY - FRONTAGE

Summary diagrams of ground floor active uses. Ground floor activation: Openings and entries, transparent, glazed areas at ground level overlooking public areas. Note: areas are measured off of aerial photographs



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KEY GROUND FLOOR ACTIVATION PRIMARY STREET BOUNDARY SECONDARY STREET BOUNDARY PROPERTY BOUNDARY VEHICLE ENTRY LOADING

111 Parramatta Road

COMPARATIVE ANALYSIS

1:10000

There is generally an inverse relationship between Landscape and Tree Cover Area with Site Coverage.

- indicative of sites with a large areas of exposed hardstand surfaces (red connecting lines)
- with
- 40% or less



There is a general correlation between sites with:

- low site coverage and large street setbacks, (green)

- high site coverage and small setbacks. (purple)

Two key types are prevalent among the sample precedents:

- Free Standing Sites with Large Street Setbacks
- Infill Sites with Small Street Setbacks



FRONT SETBACK CARPARK



BANKSTOWN 1618 Canterbury Road



NORWEST **BUSINESS PARK** 26 BROOKHOLLOW



CASULA 361 Hume Highway



NORWEST BUSINESS PARK 6 COLUMBIA DRIVE





BATHURST 98 Corporation Ave



1618 CANTERBURY ROAD, BANKSTOWN VERY LARGE SETBACK FROM STREET TO ALLOW FOR LARGE CARPARK



SOUTH NOWRA 144 Princes Highway



DOUBLE LOADED PARKING AISLE WITH NO SHADING



BANKSTOWN 1582 Canterbury Road



TREES PROVIDE SHADE TO HARDSTAND AREA



MACQUARIE BUSINESS PARK 4 EDEN PARK DRIVE



TREES PRUNED TO ENABLE SIGHTLINES WHILE PROVIDING SHADE TO HARDSTAND AREA







PROPERTY BOUNDARY BUILDING FOOTPRINT HARDSTAND ON GRADE PARKING BELOW BUILDING PARKING VEHICLE ENTRY LOADING

SIGNAGE SERVICES

SOUTH NOWRA 193 Princes Highway

PARKING IN STREET SETBACK

- A building setback of 21-24m can support a double-loaded parking aisle with landscape buffer to street and circulation space of building entry.

- Tree planting within parking spaces provides shade to hardstand areas and an attractive landscape buffer.

- Trees may be pruned and spaced to allow sight lines to both advertising and signage.

APPENDIX A: DEVELOPMENT TYPOLOGY ANALYSIS

SITE CATEGORIES

B7 PYMBLE

INFILL SITES CHARACTERISTICS:

- Small (< 6m) setbacks to primary and secondary streets

- Zero setbacks to at least one side boundary

- Often zero setbacks to both side boundaries



SAMPLE AREAS FROM TYPOLOGY AREA STUDIES

B5 HORNSBY



FREE STANDING SITES **CHARACTERISTICS:**

- Large (> 15m) setbacks to primary and secondary streets
- Large setback to rear boundary
- Large setback to at least one side boundary



B7 MACQUARIE PARK



B7 NORWEST



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B6 CONCORD



B5 NOWRA

DRAFT-WIP

APPENDIX A: DEVELOPMENT TYPOLOGY ANALYSIS

TYPOLOGIES

The Typology Analysis has led to the development of two Site Characteristics and six Building Types that are prevalent within the Zones being considered.

















BUSINESS ZONE DESIGN GUIDE FOR COMPLYING DEVELOPMENT - DRAFT FOR EXHIBITION AND COMMENT



TYPOLOGY F DATA CENTRE **TYPICAL CHARACTERISTICS:** Zones: B7 Use: Data Centre

Site Type Free Standing

Location: Business Park





OBSERVATIONS AND OPPORTUNITIES

SUMMARY OF KEY OBSERVATIONS AND OPPORTUNITIES DERIVED FROM THE TYPOLOGY PRECEDENT STUDIES

CRITERIA	OBSERVATIONS	OPPORTUNITIES	EASE	СОМ
BUILT FORM	 There is a wide range of built form typologies for commercial buildings within the B5, B6, B7 zones including: Warehouses Office Buildings, Showrooms 			
DESIGN QUALITY	Design Quality varies depending on the zoning and location, from utilitarian buildings with little visible design attention to high quality corporate headquarters located in business parks.	Encourage a higher degree of design quality though setting appropriate design criteria.	HIGH	
LOCAL CHARACTER	 The Local character within B5 and B6 zones is often lacking, and defined more by their location on busy roads than by their design. Some areas have a more distinct character based on older building stock and established landscaping and mature trees. Any local character is often secondary to corporate built form 	Set maximum building depths for particular uses. eg. Maximum depth from facade for Office uses. Set Design Criteria based on local character and aligned with DCPs	HIGH	eg. the utilit
	 Guidelines and branding. Outside of Business Park areas, the local character is often defined by the location on a main road'. 			
STREET ACTIVATION	Street activation is varied according to use and location. - Building entries are often not easily visible from the public domain Botail uses generally have more active frontance, but are also	 Set minimum length of street front activation to provide better engagement with the street, and improve CPTED 	HIGH	Acti
	 Retail uses generally have more active frontages, but are also often large 'black boxes' with small areas of activation. Dark and mirror glass is often used at ground level on office 	 Set minimum requirements for glazing transparency. Encourage external shading of clear glazing over dark/mirrored glass. 	MEDIUM	Inpu
	 Large setbacks reduce opportunities for meaningful activation or engagement with the street. 	 Encourage reduced setbacks to improve street activation and CTPED 	HIGH	
ALIGNMENT AND SETBACKS	The site layout and orientation falls into to main categories: - 'Island' types with large setbacks to street boundaries, and often	 Encourage reduced street backs to improve relationship to street and urban environment 	HIGH	- Ze
ORIENTATION AND SITE LAYOUT	 'Street Edge' types with small or zero setbacks that address the primary street frontage 	 Set maximum setbacks to limit the depth of on grade parking and hardstand between the street and building. 	MEDIUM	In o
		- Encourage zero setbacks for infill and corner sites with landscaped area to the side or rear	MEDIUM	ac
LANDSCAPING	Within B5 and B6 zones, landscaping and tree cover is typically minimal or non-existent. These zones typically have large areas of non-permeable hardstand around the building, and no on-site tree planting for shade.	 Deep soil areas for landscaped areas within on grade parking for WSUD opportunities and to provide trees for shading of hardstand areas and parked vehicles. 	MEDIUM	The typi lanc the
	The B7 zones are typically have more substantial areas of landscaping both within the site boundary and within the streets of the Business Parks.	- Where deep soil and trees are not possible or feasible along the primary frontage, locate along side or rear.	HIGH	Not
		 Encourage tree planting to shade building facades and roofs to reduce heat loading. 	MEDIUM	may
ACCESS VEHICULAR ACCESS	Vehicular access is generally prioritised over other means of access.	 Provide at least one dedicated and accessible pedestrian access point from street to building entry. 	HIGH	
	Loading is off the secondary street access where available Some buildings provide basement or covered parking areas.	 Encourage parking to rear of site behind building line where appropriate, and safe. 	MEDIUM	
FEDESTRIAN AUGESS	It is common for there to be no dedicated pedestrian access to a site, with access only available through the driveway.	 Provide clear identifiable building entry points visible from the public domain 	HIGH	



IMENT

12m is a typical maximum depth for open plan workspaces from building facade. Or 12m to enclosed spaces (meeting rooms, ity etc)

ivation will need to be defined.

ut from external consultant likely required for glazing

ero setbacks or follow predominate setback alignment?

order to reduce large areas of carparking to street. Could be a ouble loaded parking aisle + landscape setback + circulation djacent building. Approx 20.4m - to be tested

e heat island effect is an important consideration for urban areas ical of B5 and B6 zones. Increased areas of shade, permeable dscaping and WSUD will make a positive contribution to reducing heat island effect, energy costs, and stormwater runoff.

ting that tall trees may obscure signage and branding for retail I commercial premises. Lower trees (such as at South Nowra) y be an opportunity to provide shade while allowing a view over.

B5 BANKSTOWN

TYPICAL USES

- Retail outlets. e.g. Pet Barn, Officeworks, Tentworld
- Service Station
- Food and Beverage fast food outlets -
- Residential Apartment Building
- **Detached Houses** -

URBAN CHARACTERISTICS

- Predominately single storey
- Little to no tree cover
- -Large areas of hardstand
- Buildings set well back from road with on grade parking in front Building design and aesthetics follow corporate branding and -
- standards in many cases.
 - Built form oriented to property boundary, not street alignment -

- NOTES: TYPOLOGY PRECEDENT STUDIES ARE A DESKTOP REVIEW ONLY AND BASED ON SCALED AERIAL PHOTOGRAPHS. - ALL DIMENSIONS, AREAS, AND FIGURES ARE INDICATIVE
- BASED OFF AERIAL PHOTOGRAPHS ASSUMPTIONS HAVE BEEN MADE WHERE INFORMATION IS INADEQUATE















B5 BANKSTOWN - EXAMPLE 01

parking. Low shrubs, small trees.

grade parking with no planting

- Remainder of site dedicated to hardstand/on

35%

14%

50%

LANDSCAPING: - Landscaping between road and on grade

- On grade parking

Landscaped/Canopy:

Hardstand/Uncovered:

Roof:

PARKING:

SITE COVER:

1:1000

- SPECIALISED RETAIL PREMISES USE: LOT SIZE: ~ 22,000m² (Includes Petbarn, Caltex) SETBACKS: - Primary Street: 40m - Secondary: n/a - Side: 0 - Rear: 56m
- NO. STOREYS: 1 Storey
- ACTIVATION: - Clear pedestrian access through carpark
 - Building form dictated by brand guidelines
 - Limited glazed facade
- NOTES:
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- ONLY AND BASED ON SCALED AERIAL PHOTOGRAPHS. ALL DIMENSIONS, AREAS, AND FIGURES ARE INDICATIVE
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B5 BANKSTOWN - EXAMPLE 02

- Mature palm trees along Canterbury Road

30%

19%

50%

- Large area of concrete hardstand

LANDSCAPING: - Landscaped edge to street frontage

- On grade parking

Landscaped/Canopy:

Hardstand/Uncovered:

Roof:

PARKING:

SITE COVER:

1:1000

USE: HARDWARE/BUILDING SUPPLIES

LOT SIZE:	~ 2,100m ²	
SETBACKS:	Primary Street:Secondary:Side:	19m 4m
	- Rear:	0m

- NO. STOREYS: 1 Storey
- ACTIVATION: - Glazed facade along length of building facing primary street address - Pedestrian access through driveway
 - Security fencing around perimeter

NOTES:

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30/3/21



B5 BATHURST

TYPICAL USES

- Business Premises,
- Fitness centres,
- Car Showrooms/Dealerships -
- Light industrial -
- Storage buildings -
- Hardware and Building Supplies

URBAN CHARACTERISTICS

- Predominately single storey
- Large areas of lawn, but little tree cover -
- Buildings set well back from road with on grade parking in front -
- Building design and aesthetics is predominately utilitarian -

- NOTES: TYPOLOGY PRECEDENT STUDIES ARE A DESKTOP REVIEW ONLY AND BASED ON SCALED AERIAL PHOTOGRAPHS. ALL DIMENSIONS, AREAS, AND FIGURES ARE INDICATIVE
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B5 BATHURST - EXAMPLE 01

LANDSCAPING: - Landscaping between road and on grade

- On grade parking

Landscaped/Canopy:

Hardstand/Uncovered:

Roof:

PARKING:

SITE COVER:

parking. Low shrubs, small trees.

grade parking with no planting

- Remainder of site dedicated to hardstand/on

37%

5%

58%

1:1000

USE: SPECIALISED RETAIL PREMISES

LOT SIZE:	∼ 6,400m²	
SETBACKS:	 Primary Street: Secondary: Side: 	20m 20m 5m
	- neal.	1/111

NO. STOREYS: 2 Storeys

- ACTIVATION: - No footpath or pedestrian access
 - Building form dictated by brand guidelines
 - Open glazed facade to showroom

NOTES:

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- ONLY AND BASED ON SCALED AERIAL PHOTOGRAPHS. ALL DIMENSIONS, AREAS, AND FIGURES ARE INDICATIVE
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B5 BATHURST - EXAMPLE 02

LANDSCAPING: - Narrow landscape zone to side boundary

- On grade parking

Landscaped/Canopy:

Hardstand/Uncovered:

Roof:

PARKING:

SITE COVER:

grade parking with no planting

- Remainder of site dedicated to hardstand/on

47%

2%

51%

1:1000

- USE: SPECIALISED RETAIL PREMISES LOT SIZE: ~ 1,900m²
- SETBACKS: - Primary Street: 11m - Secondary: n/a - Side: 2m / 10m - Rear: 4m
- NO. STOREYS: 2 Storeys
- ACTIVATION: - No footpath or dedicated pedestrian access - Open, glazed street frontage
- NOTES: TYPOLOGY PRECEDENT STUDIES ARE A DESKTOP REVIEW
- ONLY AND BASED ON SCALED AERIAL PHOTOGRAPHS. ALL DIMENSIONS, AREAS, AND FIGURES ARE INDICATIVE
- BASED OFF AERIAL PHOTOGRAPHS ASSUMPTIONS HAVE BEEN MADE WHERE INFORMATION IS INADEQUATE













B5 HORNSBY

TYPICAL USES

- Specialty retail outlets, Jaycar, Sleeping Giant, Spotlight
- Motor services, smash repair, parts
- Food and Beverage -
- Childcare -
- -Car hire

URBAN CHARACTERISTICS

- Predominately two storey -
- Fine grained urban form on smaller lots --
- No consistent setbacks
- Zero lot
- Street setbacks vary
- Side setbacks vary
- Little evidence of design or aesthetic considerations -

- NOTES: TYPOLOGY PRECEDENT STUDIES ARE A DESKTOP REVIEW ONLY AND BASED ON SCALED AERIAL PHOTOGRAPHS. ALL DIMENSIONS, AREAS, AND FIGURES ARE INDICATIVE
- BASED OFF AERIAL PHOTOGRAPHS ASSUMPTIONS HAVE BEEN MADE WHERE INFORMATION IS
- INADEQUATE













B5 HORNSBY - EXAMPLE 01

Landscaped/Canopy: Hardstand/Uncovered:

- Large area of concrete hardstand behind with no

28%

1:1000

USE:	SPECIALISED R	ETAIL / OFFICE PREMISES			
LOT SIZE:	~ 4,800m ²		LANDSCAPING	 Narrow landscaped ed setbacks 	ge around building
SETBACKS:	 Primary Street: Secondary: Side: Bear: 	3m 3m, 13m n/a		 Large area of concrete planting or shading 	hardstand behind
			PARKING:	- On grade and below be	uilding.
NO. STOREYS:	2 Storey + base	ement carpark	SITE COVER:	Roof:	63%
ACTIVATION:	- Glazed shopfro	nts to retail uses at ground level		Landscaped/Canopy:	10%

- Glazed but covered up facades to office premises at ground level

NOTES:

- TYPOLOGY PRECEDENT STUDIES ARE A DESKTOP REVIEW
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- BASED OFF AERIAL PHOTOGRAPHS ASSUMPTIONS HAVE BEEN MADE WHERE INFORMATION IS INADEQUATE













B5 HORNSBY - EXAMPLE 02

1:1000

USE:	BUSINESS / RETAIL PREMISES		
LOT SIZE:	~ 840m ²		
SETBACKS:	 Primary Street: Secondary: Side: Rear: 	3m n/a 0m / 3m 7m	
	2 Storov		

LANDSCAPING: - Grass strip in street setback - Remainder of site, concrete hardstand - On grade PARKING: SITE COVER: 52% Roof: Landscaped/Canopy: 4%

Hardstand/Uncovered:

44%

- NO. STOREYS: 2 Storey
- ACTIVATION: Clear street address and building entry

- NOTES: TYPOLOGY PRECEDENT STUDIES ARE A DESKTOP REVIEW
- ONLY AND BASED ON SCALED AERIAL PHOTOGRAPHS. ALL DIMENSIONS, AREAS, AND FIGURES ARE INDICATIVE
- BASED OFF AERIAL PHOTOGRAPHS ASSUMPTIONS HAVE BEEN MADE WHERE INFORMATION IS INADEQUATE













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B5 NOWRA

TYPICAL USES

- Specialty retail outlets
- Hardware and Building Supplies -
- Car showrooms/dealerships -
- Car Hire -
- Food and Beverage fast food -

URBAN CHARACTERISTICS

- Predominately single storey
- Little to no tree cover
- Large areas of hardstand -
- Buildings set well back from road with on grade parking in front Building design and aesthetics follow corporate branding and --
- standards in many cases.
 - Built form oriented to property boundary, not street alignment -

- NOTES: TYPOLOGY PRECEDENT STUDIES ARE A DESKTOP REVIEW ONLY AND BASED ON SCALED AERIAL PHOTOGRAPHS. - ALL DIMENSIONS, AREAS, AND FIGURES ARE INDICATIVE
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000 CONTEXT PLAN



B5 NOWRA - EXAMPLE 01

PARKING:

SITE COVER:

1:1000

USE:	SPECIALISED RETAIL PREMISES		
LOT SIZE:	~ 3,900m ²		
SETBACKS:	 Primary Street: Secondary: Side: Rear: 	20m n/a 3m / 11m 2m	
NO. STOREYS:	1 Storey		
	- Active retail stre	et frontage behind on	

Active retail street frontage behind on grade ACTIVATION: parking.

- NOTES: TYPOLOGY PRECEDENT STUDIES ARE A DESKTOP REVIEW ONLY AND BASED ON SCALED AERIAL PHOTOGRAPHS. - ALL DIMENSIONS, AREAS, AND FIGURES ARE INDICATIVE
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LANDSCAPING: - Minimal area of lawn and low shrubs within

- On grade at front and side - Loading area at rear

Landscaped/Canopy:

Hardstand/Uncovered:

- Large areas of concrete hardstand

46%

10%

44%

setbacks.

Roof:





PARKING 1 STOREY SIGNAGE SITE ENTRY/EXIT SETBACK AL TO STREET PRINCES HIGHWAY **BUILDING ENTRY** PRINCES HIGHWAY





B5 NOWRA - EXAMPLE 02

1:1000











B6 ALEXANDRIA

TYPICAL USES

- Specialty retail outlets
- Hardware and building supplies
- Storage facilities -
- Office buildings
- Car showrooms/dealerships Recreational facilities -
- Food and Beverage

URBAN CHARACTERISTICS

- Buildings typically one to three storeys -
- Established street tree network -
- Site landscape zones typically located to front setback -
- Moderate tree coverage to front setbacks -
- Parking commonly located away from front setback including; rear, side, underground and below building parking. Building design and aesthetics vary from older warehouse buildings to newer developments. -
- _
- Built form predominately oriented to street alignment -

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B6 ALEXANDRIA - EXAMPLE 01

LANDSCAPING: - Minor landscaping to front boundary

Roof:

- On grade & basement

Landscaped/Canopy: Hardstand/Uncovered: 68%

0.5%

31.5%

PARKING:

SITE COVER:

1:1000

USE:	RETAIL PREMISES / HARDWARE/BUILDING SUPPLIES / OFFICE PREMISES	
LOT SIZE:	~ 4,950m ²	
SETBACKS:	 Primary Street: Secondary: Side: Rear: 	2m n/a 0m 0m
NO. STOREYS:	4 Storey	

- ACTIVATION: - Active retail street frontage with outdoor seating - Balconies and glazing to upper levels fronting primary street
- NOTES: TYPOLOGY PRECEDENT STUDIES ARE A DESKTOP REVIEW
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B6 ALEXANDRIA - EXAMPLE 02

LANDSCAPING: - Landscaping to front setback

Roof:

- Covered below building - Open air to upper level

Landscaped/Canopy:

Hardstand/Uncovered:

60%

7%

34%

PARKING:

SITE COVER:

1:1000

USE: **RETAIL PREMISES / SELF STORAGE**

LOT SIZE:	∼ 4,850m ²	
SETBACKS:	 Primary Street: Secondary: Side: 	4m n/a 0m
	- near.	UIII

- NO. STOREYS: 3 Storey
- ACTIVATION: - Building entries of building frontage - Glazed shopfronts to retail uses at ground level

- NOTES: TYPOLOGY PRECEDENT STUDIES ARE A DESKTOP REVIEW
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ZERO SETBACK TO SIDE BOUNDARY BUILDING ENTRIES ZERO SETBACK TO SIDE BOUNDAR LOADING DOCK/ CARPARK ENTRY/EXIT SETBACK ALIGNMENT





B6 CASULA

TYPICAL USES

- Car showrooms/dealerships
- Car service stations -
- Car wash services -
- Car/truck rental -
- Service stations
- Hardware and building supplies
- Health pharmacy stores _
- Food and Beverage hotel, fast food _ outlets

URBAN CHARACTERISTICS

- Buildings predominately two storey
- Building vary substantially in size between use. e.g. car showroom/dealership other uses. _
- Larger lots setback such as car showrooms setback from streets _ with parking out front. Smaller lots have zero to minimal setback with parking out rear.
- Limited to no tree cover -
- -Building signage prominently located on buildings or signage at boundary.

- NOTES: TYPOLOGY PRECEDENT STUDIES ARE A DESKTOP REVIEW ONLY AND BASED ON SCALED AERIAL PHOTOGRAPHS. ALL DIMENSIONS, AREAS, AND FIGURES ARE INDICATIVE
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B6 CASULA - EXAMPLE 01

1:1000

- USE: SPECIALISED RETAIL PREMISE
- LOT SIZE: ~ 2,200m²
- SETBACKS: - Primary Street: 28m - Secondary: 0m - Side: 0m - Rear: 16m
- NO. STOREYS: 2 Storey
- Indirect/secondary pedestrian access ACTIVATION: - Building form dictated by brand guidelines
 - Open glazed facade to showroom

NOTES:

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LANDSCAPING: - Minimal area of lawn and low shrubs to side

Landscaped/Canopy:

Hardstand/Uncovered:

30%

2%

68%

boundary.

- On grade

Roof:

PARKING:

SITE COVER:









B6 CASULA - EXAMPLE 02

PARKING:

SITE COVER:

1:1000

USE:	SPECIALISED RETAIL		
LOT SIZE:	~ 1,200m ²		
SETBACKS:	 Primary Street: Secondary: Side: Rear: 	8m 14m 0m 0m	
NO. STOREYS:	1 Storey		

ACTIVATION: - Open ground floor retail and garage frontage.

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LANDSCAPING: - Narrow strip of landscaping to street setback with lawn and small shrubs.

Landscaped/Canopy:

Hardstand/Uncovered:

48%

4%

48%

- On grade

Roof:









B6 WAITARA/HORNSBY

TYPICAL USES

- Car showrooms/dealerships
- Car service stations
- Car wash services
- Car/truck rental
- Petrol stations
- Hardware and building supplies
- Food and Beverage hotel, fast food outlets

NOTES: - TYPOLOGY PRECEDENT STUDIES ARE A DESKTOP REVIEW

URBAN CHARACTERISTICS

- Buildings predominately one-two storey
- Building vary substantially in size between use. e.g. car showroom/dealership and other uses.
- Buildings typically with minimal setback for portion of front boundary with parking/showroom display adjacent to side of building.
- Minimal tree coverage within lots.
- Building signage prominently located on buildings or signage at boundary.



STREET PERSPECTIVE VIEW 1











B6 WAITARA/HORNSBY - EXAMPLE 01

1:1000

- USE: SPECIALISED RETAIL PREMISE
- LOT SIZE: ~ 700m²
- SETBACKS: - Primary Street: 0m - Secondary: 0m - Side: 0m - Rear: 0m
- NO. STOREYS: 2 Storev
- ACTIVATION: - Clear dedicated pedestrian entry of secondary street - Blank facade to street

NOTES:

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LANDSCAPING: - No landscaping within site boundaries

Pattison Avenue

Landscaped/Canopy:

Hardstand/Uncovered:

Roof:

- Two on-grade parking spots accessed off

88%

0%

12%

PARKING:

SITE COVER:









B6 WAITARA/HORNSBY - EXAMPLE 02

1:1000

USE: SPECIALISED RETAIL PREMISE

LOT SIZE:	~ 2,800m ²	
SETBACKS:	Primary Street:Secondary:Side:Rear:	2m n/a 0m 0m

- NO. STOREYS: 3 Storey
- ACTIVATION: - Open glazed facade to showroom - Dedicated pedestrian entry off Pacific Highway

- NOTES: TYPOLOGY PRECEDENT STUDIES ARE A DESKTOP REVIEW
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LANDSCAPING: - Minimal landscaping to front setback

Roof:

- Below building parking

Landscaped/Canopy:

Hardstand/Uncovered:

88%

3%

8%

PARKING:

SITE COVER:







BUSINESS ZONE DESIGN GUIDE FOR COMPLYING DEVELOPMENT - DRAFT FOR EXHIBITION AND COMMENT

DRAFT-WIP

30/3/21



B6 CONCORD

TYPICAL USES

- Car showrooms/dealerships
- Car service stations
- Car wash services
- Petrol stations
- Apartment buildings
- School
- Office premises
- Aged care
- Hardware and building supplies
- Food and Beverage restaurants, pubs, etc.

NOTES: - TYPOLOGY PRECEDENT STUDIES ARE A DESKTOP REVIEW ONLY AND BASED ON SCALED AERIAL PHOTOGRAPHS. - ALL DIMENSIONS, AREAS, AND FIGURES ARE INDICATIVE

URBAN CHARACTERISTICS

- Building vary substantially in size between use. e.g. car showroom/dealership and other uses.
- Buildings typically with minimal setback to highway with exception of selected car showroom/dealerships with larger setbacks for vehicle display.
- Minimal tree coverage



STREET PERSPECTIVE VIEW 1









B6 CONCORD - EXAMPLE 01

LANDSCAPING: - Landscaping to front setback

Landscaped/Canopy:

Hardstand/Uncovered:

Roof:

- Covered upper level parking to rear.

69%

5%

26%

PARKING:

SITE COVER:

1:1000

- USE: SPECIALISED RETAIL PREMISE
- LOT SIZE: ~ 2,250m² - Primary Street: 6m SETBACKS: - Secondary: n/a - Side: 0m - Rear: 0m
- NO. STOREYS: 2 Storey
- ACTIVATION: - Open glazed facade to showroom
 - Dedicated pedestrian entry off Parramatta Road
 - Building form dictated by brand guidelines

NOTES:

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B6 CONCORD - EXAMPLE 02

LANDSCAPING: - Low planters in Street setback

Roof:

- Basement parking

Landscaped/Canopy:

Hardstand/Uncovered:

81%

5%

14%

PARKING:

SITE COVER:

1:1000

USE: **OFFICE PREMISES**

LOT SIZE:	~ 1,700m ²	
SETBACKS:	 Primary Street: Secondary: Side: Rear: 	5m 4m 0m 0m

- NO. STOREYS: 3 Storey
- ACTIVATION: - Opaque glazing to ground floor. - Dark/Mirror glazing to upper levels

- NOTES: TYPOLOGY PRECEDENT STUDIES ARE A DESKTOP REVIEW
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B7 MACQUARIE PARK

TYPICAL USES

- Office buildings. e.g. Sanofi, Toshiba, Nielsen, Ericsson, Optus, Virgin Mobile, ICON,
- Early childhood education facilities -
- Food and drink outlets commonly cafes and food outlets located within larger office building floorplates, fast food outlets,
- Data centres
- Pharmaceutical companies
- Hotels

URBAN CHARACTERISTICS

- Large block sizes
- Large building setbacks -
- Good established tree coverage to lots and building setbacks -
- Large scale buildings typically with multiple street frontages -
- Larger lots such as Optus comprise of multiple buildings
 Typically on-grade parking to buildings perimeter

- NOTES: TYPOLOGY PRECEDENT STUDIES ARE A DESKTOP REVIEW
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B7 MACQUARIE PARK - EXAMPLE 01

1:1000

USE:	OFFICE PREMIS PROFESSIONAL	ES SUITES, MEDICAL CENTRE					
LOT SIZE:	~ 7,500m ²		LANDSCAPING:	 Landscaped front setba Some tree planting with perimeter of site 	ack with established trees hin parking around		
SETBACKS:	Primary Street:Secondary:Side:	15m n/a 12-17m		 Unbuilt site are is prede parking and vehicle according 	ominately hardstand for cess		
	- Rear:	20m	PARKING:	- On grade around perim	eter of site		
NO. STOREYS:	2-4 Storeys		SITE COVER:	Roof: Landscaped/Canopy:	28% 14%		
ACTIVATION:	 No pedestrian e Building entry p Mirror glass fac 	entry. Entry via driveway only oint unclear from public domain ed to street		Hardstand/Uncovered:	58%	-	
NOTES:							

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DRAFT-WIP

30/3/21



B7 MACQUARIE PARK - EXAMPLE 02

1:1000

USE:	OFFICE PREMISES

LOT SIZE:	~ 18,000m ²	
SETBACKS:	Primary Street:Secondary:Side:Rear:	20-30m n/a 3-25m 30m
NO. STOREYS:	2-5 Storeys	

- Clear pedestrian entry to site ACTIVATION:
 - Building entries off pedestrian circulation
 - Building entries are not immediately apparent from the public domain

NOTES:

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- Some tree planting within parking around

- Front and rear setbacks utilised for parking

31%

24%

45%

- Internal landscaped courtyard

perimeter of site

Landscaped/Canopy:

Hardstand/Uncovered:

- On grade

- Basement

Roof:

PARKING:

SITE COVER:









BUSINESS ZONE DESIGN GUIDE FOR COMPLYING DEVELOPMENT - DRAFT FOR EXHIBITION AND COMMENT



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B7 MACQUARIE PARK - EXAMPLE 03

1:1000

USE:	LIGHT INDUSTRY	/ DATA CENTRE

LOT SIZE:	~ 9,700m ²	
SETBACKS:	- Primary Street: - Secondary: - Side:	18-26m n/a 15 / 3m

- 9m
- Rear:

NO. STOREYS: 3 Storevs

- ACTIVATION: Clear pedestrian entry to site
 - Building entries off pedestrian circulation
 - Building articulation and massing enlivens the enclosed box typical of this typology

NOTES:

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STREET PERSPECTIVE

LANDSCAPING: - Relatively large landscaped area at front setback with established trees

- Internal landscaped courtyard

- On grade visitor parking

Roof/Rooftop parking:

Landscaped/Canopy:

Hardstand/Uncovered:

perimeter of site

PARKING:

SITE COVER:

- Some tree planting within parking around

- Front and rear setbacks utilised for parking

- Basement loading and staff parking (assumed)

51%

26%

23%





BUSINESS ZONE DESIGN GUIDE FOR COMPLYING DEVELOPMENT - DRAFT FOR EXHIBITION AND COMMENT



30/3/21

DRAFT-WIP

B7 PYMBLE

TYPICAL USES

- Retail outlets. e.g. Hume Building Products,
- Office buildings. e.g. Busways Group, Calix,
- UGL, MCS, etc. Petrol Station
- Vehicle Service Stations -
- Fire and Rescue Station -
- Food and beverage food outlets
- Storage facilities. e.g. Kennards Self Storage, _ Storage King

URBAN CHARACTERISTICS

- Predominately two-three storey buildings
- Tree coverage predominately to streets reserve, front setback and lot boundaries.
- Street setbacks vary depending on uses. e.g. minimal setback for office buildings and larger setbacks for other uses. Sloping topography results in parking commonly located below -
- the building.
- Built form typically rectilinear, oriented to side boundaries and to the street on rectilinear blocks.

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PERSPECTIVE VIEW



5000 CONTEXT PLAN



B7 PYMBLE - EXAMPLE 01

PARKING:

SITE COVER:

LANDSCAPING: - Narrow landscaped edge to primary and secondary streets

Landscaped/Canopy:

Hardstand/Uncovered:

86%

1%

19%

- Basement

Roof:

1:1000

USE: WAREHOUSE / SELF STORAGE

LOT SIZE:	~ 3,160m ²	
SETBACKS:	 Primary Street: Secondary: Side: Rear: 	5m 3-4m 0m 0m

NO. STOREYS: 2-6 Storeys

- Glazed ground floor shopfront facades to street ACTIVATION:
 - Building form follows street with large areas of
 - blank facade due to building use. - Corner activation

NOTES:

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BUSINESS ZONE DESIGN GUIDE FOR COMPLYING DEVELOPMENT - DRAFT FOR EXHIBITION AND COMMENT



DRAFT-WIP

B7 PYMBLE - EXAMPLE 02

PARKING:

SITE COVER:

1:1000

USE:	OFFICE PREMISES / WAREHOUSE / STORAGE
LOT SIZE:	~ 6.850m ²

SETBACKS:	 Primary Street: Secondary: Side: 	8m n/a 0m / 10m
	- Side:	0m / 10m
	- Rear:	0m

NO. STOREYS: 4-5 Storeys

- Mirror glass to office building facade to street. ACTIVATION: - Clear entry points

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LANDSCAPING: - Landscaped edge to primary street setback with

mature trees and planting.

- Basement/Under, Roof top

73%

9%

22%

Roof/Rooftop parking:

Landscaped/Canopy:

Hardstand/Uncovered:









B7 ARTARMON

TYPICAL USES

- Car & motorcycle dealerships -
- Vehicle Service stations
- Car rentals
- Retail outlets. e.g. Golf Smart, Instyle Pools & Spas
- Office building. e.g. Fox Sports, MicroChannel Residential apartment building
- Food and beverage fast food outlet
- Storage facilities. e.g. Storage Works

URBAN CHARACTERISTICS

- Predominately two-three storey buildings
- Little to no tree cover. Minimal to no landscape within property boundary.
- Street setbacks vary depending on uses. e.g. large setback for car dealerships and reduced setback for other uses. -
- Car dealerships commonly set well back from road with on grade parking in front
- Building design and aesthetics follow corporate branding and _ standards in many cases.
- Built form typical oriented to street alignment -

- NOTES: TYPOLOGY PRECEDENT STUDIES ARE A DESKTOP REVIEW ONLY AND BASED ON SCALED AERIAL PHOTOGRAPHS. - ALL DIMENSIONS, AREAS, AND FIGURES ARE INDICATIVE
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B7 ARTARMON - EXAMPLE 01

LANDSCAPING: - Landscaped setback to primary street, with low

- Basement, access off rear street

- Small area of landscaping to rear adjacent

71%

10%

19%

shrub planting.

Landscaped/Canopy:

Hardstand/Uncovered:

driveway.

Roof:

PARKING:

SITE COVER:

1:1000

USE	OFFICE PREMISES
00L.	

LOT SIZE: ~ 4,150m² SETBACKS: - Primary Street: 9m (Follows predominant setback alignment) - Secondary: 3m - Side: 0

n/a

- Rear:
- NO. STOREYS: 1-6 Storeys
- **ACTIVATION:** Clear entry point.
 - Building articulation, structure and colour,
 - defines lower two levels
- NOTES: Through site link adjacent site.
- NOTES:
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- 118 m(RL 122m RL HEIGHT CONTROL 12 m WILLOUGHBY CITY COUNCIL LEP - HEIGHT OF BUILDING













B7 ARTARMON - EXAMPLE 02

LANDSCAPING: - Narrow landscaped strip to primary street and

Landscaped/Canopy:

Hardstand/Uncovered:

PARKING:

SITE COVER:

Roof:

part of secondary street with low shrub planting.

89.5%

10%

0.5%

- Basement, access off secondary street

1:1000

- USE: WAREHOUSE/STORAGE FACILITY
- LOT SIZE: ~ 2,150m²
- SETBACKS: - Primary Street: 2m
- Secondary: 3m
 - Side:
 - Rear:
 - n/a - Roof line appears to have zero setback

0

NO. STOREYS: 3 Storeys

- **ACTIVATION:** No pedestrian entry. Entry through carpark - Blank glazed facade to street
- NOTES:
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B7 NORWEST

TYPICAL USES

- Office Premises
- Food and beverage e.g. cafe. -
- Church --
- Data Centre
- Serviced apartments

URBAN CHARACTERISTICS

- 1-6 Storey buildings, with setbacks to all boundaries
- Large landscaped setbacks to street front -
- Areas of established landscaping and mature trees -
- Street trees -
- Commercial building typologies
- Mix of on grade and basement parking

- NOTES: TYPOLOGY PRECEDENT STUDIES ARE A DESKTOP REVIEW ONLY AND BASED ON SCALED AERIAL PHOTOGRAPHS. - ALL DIMENSIONS, AREAS, AND FIGURES ARE INDICATIVE
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REET PERSPECTIVE VIEW 3







B7 NORWEST - EXAMPLE 01

LANDSCAPING: - Landscaped setbacks to perimeter

- High retaining wall to street

- Sparse but established trees within rear setback

24%

44%

32%

1:1000

USE:	OFFICE PREMISES / DATA CENTRE (TBC)	
LOT SIZE:	~ 8,600m ²	
SETBACKS:	Primary Street:Secondary:Side:Rear:	23m n/a 7m / 23m 41m
NO. STOREYS:	3 Storeys	

- Limited ground floor activation

PARKING: - On grade SITE COVER: Roof: Landscaped/Canopy: Hardstand/Uncovered:

ACTIVATION:

- NOTES: TYPOLOGY PRECEDENT STUDIES ARE A DESKTOP REVIEW
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B7 NORWEST - EXAMPLE 02

boundary

Roof:

PARKING:

SITE COVER:

LANDSCAPING: - Large landscaped setback to street and rear

Landscaped/Canopy:

Hardstand/Uncovered:

- Large, established trees provide shade to hardstand and building facades.

16%

47%

37%

- On grade parking and loading areas

1:1000

USE:	OFFICE PREMISES/WAREHOUSE		
LOT SIZE:	~ 7,400m ²		
SETBACKS:	 Primary Street: Secondary: Side: Rear: 	40m n/a 15m 36m	
NO. STOREYS:	2 Storey		
ACTIVATION:	- No dedicated pedestrian access		

- Building entry clearly identified

NOTES:

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