FOREWORD

Where and how we live in Victoria will continue to change over the next three decades. By 2030 Melbourne will grow by around one million people, and more than 620,000 households. Our population is also ageing, and this is one reason why the number of households with one and two people is expected to grow. New housing will be needed to accommodate this increase in population and the demand for different types of houses.

Melbourne 2030, our plan to protect what we love about Melbourne, is a response to the need to sustainably house our growing and ageing population. Creating more housing choices in established urban centres near shops and transport will take the development pressure off our traditional low-rise neighbourhoods. Encouraging more housing, employment and community services in centres that are well serviced by public transport reduces the need for car travel and helps ensure vibrant urban centres that have the shops, services, jobs and entertainment that people want and need.

These guidelines set out objectives and suggestions for designing activity centres to ensure that they are exciting places where people want to live, work, shop and play. They will help ensure that we protect our liveability, now and for the future.

ROB HULLS, MP
Minister for Planning
INTRODUCTION
Melbourne’s population will grow substantially over the next 30 years. To manage this change in a sustainable way, *Melbourne 2030* encourages new development at activity centres near current infrastructure.
These guidelines have been developed to support councils and developers in creating well designed activity centres.

Activity centres reduce the need to travel by concentrating housing, employment and services (for example, community services, municipal service centres, parks and other public facilities such as medical centres, shops and restaurants) into consolidated centres of activity. This means only one trip is needed to fulfil multiple purposes. Encouraging new development at activity centres where walking and cycling are encouraged, and which are connected by public transport, further reduces the need for car travel. Conversely, a centre with poor public transport services, inconveniently located bus stops and poor walking and cycling connections to the rest of the centre and to the surrounding community perpetuates unsustainable levels of car use.

So how should different activities be integrated into a coherent, compact, walkable centre?

*Melbourne 2030’s* vision, principles and key directions are best met when good urban design assists activity centres to fulfil the performance criteria for activity centres (*Melbourne 2030* p. 53).

From an urban design perspective, the street should be the principal agent for integrating activities into a coherent, compact, walkable centre. Streets are multifunctional public spaces that connect most activity within our towns and cities; therefore, extending the existing street system should be the starting point for any activity centre development. People gain access to, and move around, a centre using its streets and laneways. Activity that occurs along street edges, coupled with traffic in the street, tend to make footpaths feel safer than segregated pedestrian malls, particularly out of hours.

However, there is no single response to the design of activity centres; their future form will vary with individual circumstances. Every activity centre has its own characteristics, and one of the intentions of urban design is to reveal and highlight these. In designing and developing activity centres, it is important that all nine directions of *Melbourne 2030* are taken into consideration.
The diagram below shows the relationship between design objectives and suggestions.

Design principles in the State Planning Policy Framework
Must be considered

Design Elements:
Should be considered

Design Objectives:
Should be achieved

Design Suggestions:
Will generally achieve the design objectives

PURPOSE OF THESE GUIDELINES

The State Planning Policy Framework sets out design principles in Clause 19.03 that must be taken into account in the design of urban spaces and buildings. These design principles include context; public realm; landmarks, views and vistas; pedestrian spaces; heritage; consolidation of sites and empty sites; light and shade; energy and resource efficiency; architectural quality; landscape architecture. The Activity Centre Design Guidelines have been developed to assist planners and designers in applying these principles to create high-quality activity centres.

These guidelines will primarily assist in developing planning scheme policies and controls, but may also assist with the preparation and assessment of planning applications. It is expected that these guidelines will be used to inform the structure planning process as well as to guide the design outcomes for a centre once the structure plan is in place. It is envisioned that, in time, individual councils will develop their own design guidelines for their centres and use this document as a guide.

The guidelines are structured around eight elements of design considerations:

→ Element 1: urban structure
→ Element 2: stations and interchanges
→ Element 3: street design
→ Element 4: public spaces
→ Element 5: building design
→ Element 6: malls and large stores
→ Element 7: higher density housing
→ Element 8: car parking.

Under each element is a series of general design objectives. Each objective has a corresponding set of related design suggestions that will generally achieve a good design response.

The guidelines are intended to provide advice, and need not be rigidly adhered to in every activity centre. As each activity centre is different, these guidelines need to be applied in a way that considers the existing context and form of each individual centre. The application of the guidelines should also consider the significance of the centre to the local or regional catchment.
WHAT MAKES FOR GOOD ACTIVITY CENTRE DESIGN?

Activity centres should be the focal points of the local community they service and can be essential components of an area’s local identity. They should be the places where local services are concentrated and at which public transport interchange occurs. Their design and appearance should emphasise public and civic values. Their proper planning is the key to reducing car dependence in Melbourne and other urban centres. The aims that should guide the design of every activity centre are listed below.

AIMS FOR ACTIVITY CENTRES DESIGN

1. Develop a good-quality public environment
   Ensure public spaces within individual developments and throughout activity centres are comfortable, engaging environments.

2. Promote street-based patterns of connection
   Directly link developments within activity centres and with their surrounding neighbourhoods using a fine-grained street system that accommodates diverse modes of travel.

3. Improve community safety
   Promote the natural surveillance of public space and street edge activity. This can be achieved by ensuring buildings address the street and contain active uses on the ground floor.
   Clearly define public and private space.

4. Encourage a mix of uses
   Optimise the diversity of uses in activity centres where the mix promotes vitality, extends the hours of activity and intensifies the use of existing infrastructure.

5. Improve pedestrian and cycling amenity
   Encourage an increase in pedestrian and cycling traffic by maximising the convenience, safety and appeal of these modes of travel.

6. Promote a public transport focus
   Better integrate public transport with activity centres by increasing community comfort, safety and accessibility.

7. Increase accessibility and integration
   Ensure activity centres are a focus for the entire community, are accessible to all, and are physically integrated with the surrounding neighbourhood.

8. Encourage environmental sustainability
   Promote the efficient reuse of existing assets, prolong the life cycle of structures, ensure energy efficiency, and water and resource conservation and encourage appropriate orientation and use of materials.

*Based on Melbourne 2030’s principles for the development of urban design guidelines.

By following each of the design objectives and design suggestions outlined in this document, the aims for activity centre design should be addressed.

As each activity centre is different, the application of these guidelines will require a considered approach to the context and objectives for each individual centre.
RELATED GUIDELINES

The Department of Sustainability and Environment has released a number of guidelines that are relevant to designing safer environments. These should be used in conjunction with the Activity Centre Design Guidelines, where appropriate.

Guidelines for Higher Density Residential Development, 2004

These Guidelines have been developed to assist designers and planners apply these design principles to proposals for higher density residential development. The Guidelines provide ‘better practice’ design advice for higher density residential development that promotes high quality public and private amenity and good design.

The Guidelines will assist:
• Developers and designers when developing proposals and preparing applications
• Councils when assessing applications.

The Guidelines are structured around six elements of design consideration:

- Urban context
- Building envelope
- Street pattern and street-edge quality

The achievement of sustainable design outcomes needs to be considered. The Department of Sustainability and Environment (DSE) has published Environmentally Sustainable Design and Construction: Principles and Guidelines for Capital Works Projects (July 2003). This document encourages Government Departments and building professionals to address the following principles for reducing the ecological impact of capital works:

- Energy conservation
- Water conservation
- Minimisation of fossil fuel usage associated with transport
- Preservation of natural features of sites
- Building materials conservation
- Waste minimisation
- Enhancement of indoor environmental quality
- Appropriate landscaping
- Enhancement of community life
- Maintenance

These guidelines focus on achieving sustainable outcomes by comparing construction costs derived from triple bottom line objectives with conventionally designed buildings.

New regulations will be introduced under the Building Code of Australia from July 2005, that require all new multi-storey residential developments to achieve a 5 star energy rating. This will become a mandatory requirement that will affect the design of higher density housing.

Safer Design Guidelines For Victoria, 2005

Design for safety is also a significant issue. It aims to minimise the opportunity for crime and reduce the fear of crime for people using private and public space. The Safer Design Guidelines for Victoria have been developed to provide design objectives and suggestions that will assist in creating urban environments with enhanced personal safety and property security. These guidelines are based on the following set of aims:

- Maximise visibility and surveillance of the public environment
- Provide safe movement, good connections and access
- Maximise activity in public spaces
- Clearly define public and private space responsibilities
- Manage public space to ensure that it is attractive and well used.
ELEMENT 1 URBAN STRUCTURE
A well designed urban structure will ensure activity centres are highly accessible and vibrant environments. An activity centre with a street layout that accommodates all modes of transport and allows a mix of uses maximises the community’s access to a variety of services and facilities, while minimising the need for car travel. By increasing the mix of uses within a centre, the vibrancy and economic viability of the centre is also enhanced.
STREET LAYOUT

OBJECTIVE 1.1:
To develop a street layout with a focus on public transport services.

DESIGN SUGGESTION 1.1.1 – LOCATE NEW ACTIVITY CENTRES ON MAJOR PUBLIC TRANSPORT NODES, ALONG MAIN ROADS AND CLOSE TO ARTERIAL SYSTEMS TO ENSURE THEY ARE EASILY ACCESSIBLE.

DESIGN SUGGESTION 1.1.2 – DEVELOP A STREET AND BLOCK LAYOUT TO ALLOW FOR THE REQUIREMENTS OF LOCAL PUBLIC TRANSPORT SERVICES AND CONNECTIONS TO THE PRINCIPAL PUBLIC TRANSPORT NETWORK.

For example, avoid dead-end streets and ensure adequate road width and block layout for public transport vehicles.

DESIGN SUGGESTION 1.1.3 – SEEK OPPORTUNITIES TO PROVIDE BUS-ONLY LANES WHERE BUS SERVICES CONVERGE INTO ACTIVITY CENTRES.

OBJECTIVE 1.2
To provide a well-connected road network with co-located access for all users.

DESIGN SUGGESTION 1.2.1 – CREATE AN ‘INTER-CONNECTED’ ARRANGEMENT OF STREETS WITH INCORPORATED FOOTPATHS AND CYCLE PATHS.

A fine grained street system will encourage pedestrian use and street activity.

DESIGN SUGGESTION 1.2.2 – DEVELOP A STREET LAYOUT THAT ACCOMMODATES VEHICULAR TRAFFIC AND ON-STREET PARKING NEEDS WITHOUT COMPROMISING WALKING AND CYCLING AMENITY.

Avoid solutions that segregate the different travel modes along separate circulation systems as this can result in less activity in the street and can therefore reduce pedestrian amenity.

DESIGN SUGGESTION 1.2.3 – EXTEND THE EXISTING PRINCIPAL BICYCLE NETWORK OR MUNICIPAL BICYCLE NETWORK INTO THE ACTIVITY CENTRE AND LINK NEW BICYCLE ROUTES INTO THIS NETWORK.

DESIGN SUGGESTION 1.2.4 – PROVIDE ADEQUATE ACCESS FOR COMMERCIAL VEHICLE, SERVICE AND LOADING ACTIVITIES USING THE ACTIVITY CENTRE STREETS.

DESIGN SUGGESTION 1.2.5 – ACCOMMODATE HEAVY/INAPPROPRIATE VEHICLE MOVEMENTS ON FREEWAYS OR ARTERIAL ROADS THAT AVOID THE ACTIVITY CENTRE.

In doing so, ensure bypasses do not siphon off all vehicular traffic as it can add life and activity along activity centre streets, and increase the economic viability of the centre.
OBJECTIVE 1.3
To provide appropriate street widths.

DESIGN SUGGESTION 1.3.1 – RELATE THE WIDTH OF STREETS TO THE CHARACTERISTICS OF ADJOINING LAND USES, THE SCALE, TYPOLOGY AND SETBACK OF BUILDING DEVELOPMENTS, THE TYPE OF STREET FRONTAGE AND ACCESS REQUIREMENTS.

Consider the design of the entire street width and not just the roadway with regard to the activities that occur in the street (for example, outdoor dining, public transport waiting facilities, etc.).

DESIGN SUGGESTION 1.3.2 – PROVIDE A STREET CROSS-SECTION THAT ALLOWS FOR AN ADEQUATE LEVEL OF ON-STREET PARKING.

DESIGN SUGGESTION 1.3.3 – CONSIDER THE NEED FOR EMERGENCY AND SERVICE VEHICLE ACCESS (THIS GENERALLY REQUIRES STREETS THAT ARE 4 METRES WIDE AND HAVE 4 METRES VERTICAL CLEARANCE).

OBJECTIVE 1.4
To integrate activity centre streets into the local street network

DESIGN SUGGESTION 1.4.1 – EXTEND KEY ELEMENTS OF REGULARLY STRUCTURED SURROUNDING STREET (FOR EXAMPLE, STREET PATTERN, ORIENTATION AND ALIGNMENT INTO THE ACTIVITY CENTRE).

Minimise winding street alignments, which increase pedestrian/cycling distances.

DESIGN SUGGESTION 1.4.2 – USE A BLOCK SIZE AND SHAPE THAT FOSTERS ACCESSIBILITY. (Refer to Glossary: Fine grained street systems)

DESIGN SUGGESTION 1.4.3 – PROVIDE DIRECT LINKS TO SURROUNDING NEIGHBOURHOODS, PARTICULARLY FOR PEDESTRIANS AND CYCLISTS.
MIX AND DISTRIBUTION OF USES

OBJECTIVE 1.5
To encourage a diverse mix of uses within the centre.

DESIGN SUGGESTION 1.5.1 – MIX USES VERTICALLY (SUCH AS SHOP-TOP HOUSING OR OFFICES OVER SHOPS) AND HORIZONTALLY (WHERE USES ARE BESIDE EACH OTHER).

Bear in mind accessibility requirements of mobility-impaired people.

DESIGN SUGGESTION 1.5.2 – ENCOURAGE A RICH MIX OF SHOPS AND SERVICES THAT EXTEND THE HOURS OF ACTIVITY WITHIN THE CENTRE AND WIDEN THE USE MIX TO MORE THAN RETAIL ALONE.

Uses to consider include educational, community functions, recreational, sporting, entertainment, commercial office, health and wellbeing, and medical uses.

DESIGN SUGGESTION 1.5.3 – MAXIMISE HOUSING DENSITY WITHIN THE CHARACTER AND AMENITY CONSTRAINTS OF THE CENTRE. (See Element 7: Higher Density Housing)

DESIGN SUGGESTION 1.5.4 – USE STREETS TO JOIN ACTIVITY RATHER THAN AS BOUNDARIES BETWEEN DIFFERENT USES AND DENSITIES.

OBJECTIVE 1.6
To intensify active uses along street frontages.

DESIGN SUGGESTION 1.6.1 – CONCENTRATE SHOPS INTO CONTINUOUS ACTIVE FRONTAGES, WITH MINIMUM SETBACKS TO THE STREET.

To achieve this, ensure uses are not separated from the footpath by car parking or landscaping. Large free-standing buildings separated by under-utilised landscape space or car parks, and single uses with large frontages, should also be discouraged, particularly if the hours of occupation are limited.

DESIGN SUGGESTION 1.6.2 – CONSIDER THE LEVEL OF STREET ACTIVITY GENERATED BY USES DURING THE DAY AND NIGHT AND THE POTENTIAL EFFECTS THIS ACTIVITY (OR LACK OF IT) MAY HAVE ON STREET SAFETY AND AMENITY.

DESIGN SUGGESTION 1.6.3 – ENSURE FACILITIES AND SERVICES THAT GENERATE HIGH VEHICULAR TRAFFIC VOLUMES ARE NOT LOCATED ON SMALL STREETS.
OBJECTIVE 1.7
To physically connect surrounding residential neighbourhoods to the uses in the activity centre.

DESIGN SUGGESTION 1.7.1 – ENSURE GROUND-LEVEL CAR PARKS DO NOT SEPARATE THE CENTRE PHYSICALLY FROM SURROUNDING NEIGHBOURHOODS.

This can be achieved by making car-parking areas more compact, or by putting them underground and introducing new uses such as higher density housing over the top of them. (See Element 8: Car Parking)

DESIGN SUGGESTION 1.7.2 – INCORPORATE RESIDENTIAL USES INTO NEW DEVELOPMENTS THAT ADJOIN A RESIDENTIAL NEIGHBOURHOOD TO PROVIDE A TRANSITION FROM ACTIVITY CENTRE USES.
ELEMENT 2 TRAIN STATIONS AND PUBLIC TRANSPORT INTERCHANGES
If activity centres are to fulfil the promise of increased sustainability, they need to attract more public transport users. Many activity centres function as critical nodes in the public transport system already. However, if public transport use is to be increased, it must become a central feature of every activity centre and offer a more convenient alternative to car-based travel. Improving the connection between different routes and modes of public transport in well-located interchanges that are integrated with the street and building fabric of the activity centre is an important component in encouraging increased use.
STATION AND INTERCHANGE ENVIRONS

OBJECTIVE 2.1
To encourage public transport use by providing convenient, prominent and active stations and interchanges.

DESIGN SUGGESTION 2.1.1 – INTEGRATE TRANSIT STOPS AND INTERCHANGES INTO THE DESIGN AND LAYOUT OF THE ACTIVITY CENTRE, AND LOCATE THEM CENTRALLY.

DESIGN SUGGESTION 2.1.2 – DEVELOP STATION FORECOURTS AS PART OF AN ACTIVITY CENTRE’S PUBLIC SPACE SYSTEM.

This can be achieved by developing the entrances and approaches to stations and interchanges to enhance their appearance, and to make them function as arrival points in the activity centre and as public spaces in their own right. Entrance points that are generous in proportions and provide for safe, convenient access, will assist in this process.

DESIGN SUGGESTION 2.1.3 – SURROUND RAILWAY STATIONS, TRANSIT STOPS AND INTERCHANGES WITH ACTIVE, GROUND-LEVEL USES.

In particular, convenience shops, cafes and other day-to-day services and uses that stay open for extended periods can enhance safety and contribute to the liveliness of the interchange.

Minimise low-activity uses, large car parks and blank walls around railway stations and interchanges as they can make the interchange feel unsafe.

DESIGN SUGGESTION 2.1.4 – MAXIMISE THE EFFICIENCY OF RAILWAY STATIONS/MAJOR BUS STOPS AS TRANSPORT INTERCHANGES.

For example, provide separate, direct bus access to interchanges to avoid conflict with parking and pedestrian routes.

DESIGN SUGGESTION 2.1.5 – USE DEVELOPMENT TO FILL GAPS IN AND AROUND RAILWAY STATIONS.
PASSENGER FACILITIES

OBJECTIVE 2.2
To provide high-quality passenger amenity.

DESIGN SUGGESTION 2.2.1 – PROVIDE COMFORTABLE, WEATHER-PROTECTED STOPS.
Integrate weather-protected stops into the architecture and streetscape of the activity centre and, where
appropriate, provide air-conditioned waiting facilities and real-time travel information, in safe, active areas.

DESIGN SUGGESTION 2.2.2 – ENSURE THE INTERIOR LIGHTING OF SHELTERS SUPPORTS PEOPLE’S ABILITY TO
SEE INTO DARKER SURROUNDING AREAS AT NIGHT, BY LIMITING THE BRIGHTNESS LEVEL AND ENSURING A
HIGH QUALITY ‘WHITE-LIGHT’.

DESIGN SUGGESTION 2.2.3 – PROVIDE SECURE END-OF-TRIP BICYCLE STORAGE.
This will extend the catchment area of public transport routes.

DESIGN SUGGESTION 2.2.4 – PROVIDE LOCAL AND RELEVANT TRAVEL INFORMATION.
For example, provide route maps, timetables and clear signage to transit stops, station exits, platforms and
public facilities including toilets, telephones and taxi ranks. Where appropriate, signage should incorporate
familiar international symbols and walking times and distances and include a current contact telephone number
to call for maintenance.

OBJECTIVE 2.3
To provide safe, attractive and direct pedestrian and cycling access to stations, interchanges and
transit stops.

DESIGN SUGGESTION 2.3.1 – PROVIDE CLEAR, CONTINUOUS, DIRECT AND ATTRACTIVE PEDESTRIAN AND
CYCLE ROUTES TO STATIONS AND TRANSIT STOPS.
For example, focus well-used and connected local pedestrian paths and cycle routes (including the Principal and
Metropolitan Bicycle Network) on the station or interchange.

DESIGN SUGGESTION 2.3.2 – ENSURE A HIGH LEVEL OF VISIBILITY AND NATURAL SURVEILLANCE ALONG
ACCESS ROUTES AND ENCOURAGE ACTIVE USES TO FRONT ONTO THEM.

DESIGN SUGGESTION 2.3.3 – ENSURE SAFE AND CONVENIENT ACCESS IS PROVIDED FOR PEOPLE WITH
SPECIAL MOBILITY REQUIREMENTS SUCH AS PEOPLE WITH A DISABILITY AND THOSE WITH PRAMS AND
SHOPPING JEEPS.
RAILWAY CORRIDORS

OBJECTIVE 2.4
To minimise the dividing effect of railway corridors on activity centres.

DESIGN SUGGESTION 2.4.1 – LOOK FOR OPPORTUNITIES TO DEVELOP UNDER-UTILISED RAILWAY LAND.
The area above and alongside railway lines and stations, particularly above cuttings can often be used to
connect the two sides of the railway line closer together.

DESIGN SUGGESTION 2.4.2 – RESPECT THE EXISTING CHARACTER AND HERITAGE VALUES OF RAILWAY
STATIONS, WHERE APPLICABLE, AND MODERATE THE SCALE AND FORM OF NEW DEVELOPMENT TO SUIT.

DESIGN SUGGESTION 2.4.3 – IMPROVE THE PEDESTRIAN AND CYCLING CONNECTIVITY AROUND RAILWAY
CORRIDORS.

For example, develop cycle and walking paths along rail corridors, where appropriate, and link these paths to
both sides of the rail corridor where possible. Encourage natural surveillance of these paths to enhance the
safety of these public spaces.

DESIGN SUGGESTION 2.4.4 – CONSIDER THE ROLE OF LANDSCAPING AROUND THE RAIL CORRIDOR.

Improve the outlook from the train and the local environment and air quality by landscaping available land
beside railway lines. When undertaking landscaping, ensure existing significant vegetation is not destroyed and
that planting does not impede sightlines or the ultimate growth of vegetation.
Street environments must not only accommodate all modes of movement patterns but also provide a pleasant, comfortable and safe environment for pedestrians and cyclists. Streets that are designed to encourage people to use them, to leave their cars and explore on foot, contribute to a vibrant activity centre environment. Pedestrians, bicycles and cars all contribute to lively and interesting streets and should be encouraged to coexist alongside each other.
STREETS FOR PEOPLE

OBJECTIVE 3.1
To design streets that comfortably and safely accommodate the pedestrian and cyclist.

DESIGN SUGGESTION 3.1.1 – DESIGN FOOTPATH WIDTHS TO SUPPORT THE SOCIAL LIFE OF THE STREET AND ACCOMMODATE EXPECTED PEDESTRIAN TRAFFIC.

Consider the variety of people who will use the footpath, including people with wheelchairs or prams, all of whom travel at different speeds. Minimise changes in footpath levels and avoid physical barriers to accommodate these users.

DESIGN SUGGESTION 3.1.2 – INCLUDE THE PROVISION OF DEDICATED BICYCLE LANES/PATHS AND SECURE BICYCLE PARKING TO ENCOURAGE MORE PEOPLE TO CYCLE INSTEAD OF DRIVE.

See Bicycle Victoria’s Better local traffic controls for safer cycling and walking (2004).

DESIGN SUGGESTION 3.1.3 – ENSURE PEDESTRIANS CAN SEE ALONG PATHWAYS FOR A REASONABLE DISTANCE (AT LEAST 15 METRES IN FRONT) TO IMPROVE THEIR PERCEPTION OF SAFETY.

DESIGN SUGGESTION 3.1.4 – PROVIDE STREET PLANTING FOR SHADE, BUFFERING AND STREET ENCLOSURE.

In doing so, locate tree planting/landscaping and street furniture to ensure they do not create a visibility obstruction for road users or a roadside hazard.

DESIGN SUGGESTION 3.1.5 – ENSURE A SCALE OF STREET AND SURROUNDINGS THAT ASSIST PEOPLE TO UNDERSTAND DIMENSIONS AND SIZE RELATIVE TO THEMSELVES.

DESIGN SUGGESTION 3.1.6 – PROVIDE WELL-LIT STREETS AND PUBLIC SPACES TO ENHANCE PUBLIC SAFETY AND CONTRIBUTE TO THE LIVELY CHARACTER OF THE CENTRE.

Use ‘white light’, and avoid yellow light (as produced by sodium lighting), to ensure distortion-free visibility and higher colour rendition of objects and surfaces at night.

DESIGN SUGGESTION 3.1.7 – CLEARLY SIGNPOST OFF-STREET CAR PARKS, BICYCLE PATHS, PUBLIC TRANSPORT STOPS AND FOOTPATH CONNECTIONS.

OBJECTIVE 3.2
To ensure vehicle traffic does not compromise a good walking and cycling environment.

DESIGN SUGGESTION 3.2.1 – MANAGE TRAFFIC VOLUMES AND LOWER SPEEDS THROUGH TRAFFIC CALMING DEVICES AND INTERSECTION DESIGN MEASURES (SEE VICROADS TRAFFIC ENGINEERING MANUAL).

DESIGN SUGGESTION 3.2.2 – SEPARATE SERVICE VEHICLE ACCESS AND LOADING AREAS FROM PEDESTRIAN MOVEMENTS, WHERE POSSIBLE, TO MINIMISE POTENTIAL CONFLICTS AND THE LOSS OF ON-STREET PARKING.

DESIGN SUGGESTION 3.2.3 – PROVIDE TRAFFIC TREATMENTS SUCH AS, ISLANDS, MEDIANS AND CROSSINGS TO HELP PEDESTRIANS CROSS ROADS, AND WIDEN FOOTPATHS TO IMPROVE PEDESTRIAN CONDITIONS.
Car parks and level changes that interrupt the footpath and cycle path connectivity should be avoided.

**DESIGN SUGGESTION 3.2.4 – INCORPORATE SLOW-MOVING TRAFFIC AND CAR PARKING IN STREETS TO ENHANCE A SENSE OF SAFETY RATHER THAN CREATING PEDESTRIAN ONLY MALLS.**

### STREET EDGES

**OBJECTIVE 3.3**

*To design and plan street edges to enhance the pedestrian environment.*

**DESIGN SUGGESTION 3.3.1 – ORGANISE USES WITHIN BUILDINGS ABUTTING STREETS AND OTHER PUBLIC SPACES SO ‘ACTIVE’ GROUND FLOOR USE FOSTERS NATURAL SURVEILLANCE FOR AS LONG AS POSSIBLE EACH DAY.*

This can be achieved by encouraging a large number and variety of uses to occupy street frontages and by encouraging uses such as cafes that ‘spill out’ into the street.

**DESIGN SUGGESTION 3.3.2 – LIMIT WIDE BUILDING FRONTAGES WITH A SINGLE USE, PARTICULARLY IF THE HOURS OF OCCUPATION ARE RESTRICTED OR THE LEVEL OF ACTIVITY IS LOW (FOR EXAMPLE, FOYERS TO COMMERCIAL OFFICES).**

**DESIGN SUGGESTION 3.3.3 – RESTRICT THE USE OF BLANK WALLS AND REFLECTIVE GLAZING THAT HIDES THE PRESENCE OF ACTIVITY WITHIN BUILDINGS.**

**DESIGN SUGGESTION 3.3.4 – ENSURE BUILDINGS ARE DESIGNED SO OCCUPANTS CAN MAINTAIN EYE CONTACT WITH PEOPLE IN THE STREET.**

For example, upper level windows and balconies should overlook streets, footpaths and public spaces where possible.

**DESIGN SUGGESTION 3.3.5 – MAINTAIN THE CONTINUITY AND ALIGNMENT OF BUILT FORM TO THE STREET, AND ENSURE BUILDING FRONTAGES EXTEND TO THE FRONT BOUNDARIES OF STREETS SURROUNDING THE CENTRE TO PHYSICALLY DEFINE THE SPACE OF THE STREET AND PROVIDE STREET ENCLOSURE.**

For example, avoid vacant sites and frontages occupied by parking and service bays.

**DESIGN SUGGESTION 3.3.6 – PROVIDE SHOP VERANDAHS FOR WEATHER PROTECTION TO KEY FOOTPATH ROUTES AND PUBLIC TRANSPORT STOPS.**
Public spaces include both privately and publicly held land that the public have access to and is encouraged to use. To ensure these public spaces contribute to the sense of place in activity centres, a consistent and detailed approach is needed in their design and maintenance. A key to developing vibrant and attractive centres is providing a strong identity that builds on existing local character. To do this, it is important to understand the existing urban context of the activity centre, and the appropriate influence this has on the centre’s design.
HIGH QUALITY PUBLIC SPACE

OBJECTIVE 4.1
To provide generous, purposeful and well defined public spaces.

DESIGN SUGGESTION 4.1.1 – DEVELOP SIMPLY DESIGNED, CAREFULLY DETAILED AND WELL PROPORTIONED PUBLIC SPACES (INCLUDING STREETS) THAT INTEGRATE THE VARIETY OF BUILDINGS THAT SURROUND THEM.

Public spaces need to be consciously designed into activity centres rather than being ‘afterthought’ spaces in locations that people will not use and they should allow for a variety of activities to occur within them.

DESIGN SUGGESTION 4.1.2 – ORIENT DEVELOPMENT TO FACE TOWARD PUBLIC SPACES, WATERWAYS AND CREEKS, OPEN SPACE OR VIEWS.

DESIGN SUGGESTION 4.1.3 – PROVIDE ATTRACTIVE, WELL-LOCATED SPACES FOR MEETING AND RESTING.

DESIGN SUGGESTION 4.1.4 – PLAN, DESIGN AND LOCATE PUBLIC PLACES TO MAXIMISE THEIR SOLAR ACCESS DURING THE COOLER TIMES OF THE YEAR AND PROVIDE SHADE IN SUMMER.

DESIGN SUGGESTION 4.1.5 – DESIGN PUBLIC OUTDOOR SPACES TO MINIMISE THE EFFECT OF WIND.

DESIGN SUGGESTION 4.1.6 – CLEARLY DEFINE THE BOUNDARY BETWEEN PUBLIC USE AND PRIVATE USE SPACE.

Include transitional space where both types merge, but where clarity and rights of public use are maintained. Minimise ambiguity about the rights of normal unencumbered public use.

OBJECTIVE 4.2
To provide public space elements that are engaging, convenient and encourage use.

DESIGN SUGGESTION 4.2.1 – DESIGN A CONSISTENT SUITE OF REPEATED PUBLIC SPACE ELEMENTS AND DETAILS SUCH AS STREET FURNITURE.

DESIGN SUGGESTION 4.2.2 – MAXIMISE OPPORTUNITIES FOR PEOPLE TO SIT AND WATCH PUBLIC SPACE ACTIVITIES AND CIRCULATION.

Extend this quality beyond purpose-built public seating to as many public space elements as possible.

DESIGN SUGGESTION 4.2.3 – ENSURE SEATING ENCOURAGES USE BY LOCATING IT AT A COMFORTABLE DISTANCE FOR PEOPLE TO WATCH PASSERS-BY, AND AT REGULAR INTERVALS ALONG MAJOR WALKING ROUTES TO ASSIST THOSE WHO NEED TO PAUSE OR REST.

DESIGN SUGGESTION 4.2.4 – ENSURE LIGHTING IS A QUALITY ‘WHITE LIGHT’, THAT WILL HELP EXTEND THE USAGE TIMES OF PUBLIC SPACES.
OBJECTIVE 4.3
To ensure that the appearance of public space is continually maintained.

DESIGN SUGGESTION 4.3.1 – INSTIGATE THE PURPOSE-BUILT DESIGN OF MUNICIPAL FURNITURE ITEMS (SEATS, BINS, SIGNAGE, DRINKING FOUNTAINS, LIGHTS, KIOSKS AND SO ON) WHERE A COUNCIL RETAINS OWNERSHIP OF THE DESIGN AS WELL AS THE INFRASTRUCTURE.

These will be easier to maintain, replace and repair over a longer term than ‘off the shelf’ public furniture items.

DESIGN SUGGESTION 4.3.2 – USE FINISHES TO PUBLIC SPACES, THEIR BUILDING EDGES AND PIECES OF PUBLIC ART THAT ARE ROBUST, OF HIGH QUALITY AND ARE EASY TO MAINTAIN AND REPAIR.

DESIGN SUGGESTION 4.3.3 – DESIGN MAINTENANCE REGIMES FOR PUBLIC SPACE THAT PLACE A PRIORITY ON THE SPEEDY IDENTIFICATION, REMOVAL AND REPAIR OF ANY SIGNS OF DAMAGE.

OBJECTIVE 4.4
To ensure landscaping contributes positively to quality public space.

DESIGN SUGGESTION 4.4.1 – INTRODUCE A PLANTING PROGRAM AND LANDSCAPE ELEMENTS THAT ENGAGE THE SENSES AND BUILD A STRONG SENSE OF LOCAL PLACE.

DESIGN SUGGESTION 4.4.2 – REGULARLY MAINTAIN LANDSCAPING TO ENSURE THE SPACES ARE INVITING, COMFORTABLE AND SAFE.

DESIGN SUGGESTION 4.4.3 – MAINTAIN AND EXTEND TREE PLANTING TO PROVIDE SHADE AND IMPROVE THE ENVIRONMENT.

Choose trees that are appropriate to the context of the public space, with regard to orientation, rainfall, exposure to direct sunlight, existing landscaping heritage and the size of the space.

OBJECTIVE 4.5
To provide conveniences for public comfort.

DESIGN SUGGESTION 4.5.1 – PROVIDE ACCESSIBLE AND SAFE PUBLIC TOILETS THAT ARE WELL MAINTAINED.

DESIGN SUGGESTION 4.5.2 – PROVIDE FACILITIES THAT COMPLY WITH THE DISABILITY DISCRIMINATION ACT TO ENSURE EQUITY OF ACCESS FOR ALL USER GROUPS.

DESIGN SUGGESTION 4.5.3 – PROVIDE MAPS/SIGNS IN LARGE PUBLIC SPACES SHOWING CONNECTIONS AND DESTINATIONS, AND LOCATION OF SEATING, SHADE, PLAYGROUNDS, DRINKING FOUNTAINS AND TOILETS.

Where possible, include estimated walking times and distances, and orientate maps to be consistent with the viewer’s perspective.
OBJECTIVE 4.6
To maintain good air quality in public space.

DESIGN SUGGESTION 4.6.1 – MINIMISE EXPOSURE TO AIR POLLUTION HOT SPOTS BY LOCATING ARTERIAL FREIGHT TRAFFIC ROUTES AWAY FROM WHERE PEOPLE GATHER.

DESIGN SUGGESTION 4.6.2 – ENSURE COOKING EXHAUSTS, PLANT ROOMS, WASTE STORAGE AND SERVICES OF NEW BUILDINGS ARE NOT LOCATED ADJACENT TO PUBLIC SPACE. THIS WILL HELP AVOID ADVERSE NOISE AND ODOURS.

DESIGN SUGGESTION 4.6.3 – MINIMISE PARTICLE EMISSIONS FROM CONSTRUCTION AND DEMOLITION ACTIVITY BY APPLYING THE ENVIRONMENT PROTECTION AUTHORITY’S ENVIRONMENTAL GUIDELINES FOR MAJOR CONSTRUCTION SITES (1996).
SENSE OF PLACE

OBJECTIVE 4.7
To provide a focus for the local community and reinforce a local sense of place or identity.

DESIGN SUGGESTION 4.7.1 – DEVELOP AN URBAN CHARACTER AND LANDSCAPE THEME THAT REFLECTS THE VALUED URBAN, CULTURAL AND LANDSCAPE CHARACTER OF THE AREA.

Apply this consistently and avoid sporadic or piecemeal works/design elements. Purpose built design of municipal furniture items where council retains ownership of the design as well as the infrastructure will contribute to a unique local character.

DESIGN SUGGESTION 4.7.2 – CONSERVE AND ENHANCE BUILDINGS AND OTHER ELEMENTS OF HERITAGE VALUE AND AVOID THEIR DEMOLITION AS THEY REINFORCE LOCAL IDENTITY.


DESIGN SUGGESTION 4.7.4 – INCORPORATE LOCALLY RELEVANT URBAN ART INTO THE CENTRE AS AN INTEGRAL PART OF ITS URBAN DESIGN.

Consider clear-zone and sight distance requirements, and the requirements of mobility-impaired people when deciding on the placement and design of urban art.

DESIGN SUGGESTION 4.7.5 – INCORPORATE NATURAL AND MODIFIED LANDSCAPES INTO THE ACTIVITY CENTRE.

For example, bring the nearby/distant hills into the centre by using a landmark to visually terminate a main boulevard, or use water-sensitive design principles to manage stormwater in a unique way to contribute to local identity.
ELEMENT 5 BUILDING DESIGN
Buildings in activity centres, whether private or public, need to be carefully designed to ensure they reflect the significance they have to the broader community. Not only must they address the street and public space carefully to promote vitality (see Element 3: Street Design), they must also demonstrate respect for their local environment by sensitively addressing valued heritage places and minimising their effects on the natural environment.


HERITAGE

OBJECTIVE 5.1
To incorporate new development in heritage areas sensitively.

DESIGN SUGGESTION 5.1.1 – RETAIN AND CONSERVE BUILDINGS, AREAS AND OTHER ELEMENTS OF HERITAGE VALUE WITHIN ACTIVITY CENTRES.

This will require preventing demolition of valued heritage buildings and minimising inappropriate alterations.

DESIGN SUGGESTION 5.1.2 – IDENTIFY HERITAGE BUILDINGS THAT MAY BE UNDER-UTILISED AND HAVE THE CAPACITY FOR ADAPTIVE REUSE.

For example, redevelopment of the rear and upper levels of heritage shops may be a possibility.

DESIGN SUGGESTION 5.1.3 – RETAIN AN APPROPRIATE VISUAL SETTING AND RELATIONSHIP WHEN BUILDING ADJACENT TO HERITAGE BUILDINGS AND ELEMENTS BY TAKING INTO ACCOUNT HEIGHT, FORM AND SETBACK.

DESIGN SUGGESTION 5.1.4 – RETAIN THE INTEGRITY OF IDENTIFIED HERITAGE PRECINCTS WITHOUT NECESSARILY MIMICING HERITAGE STYLES.

DESIGN SUGGESTION 5.1.5 – WHERE THE LOCAL BUILT CONTEXT OF STREETS EXHIBITS A STRONG, REPETITIVE PHYSICAL CHARACTER OR HAS QUALITIES THAT NEED TO BE PROTECTED, ENSURE THE DESIGN OF NEW DEVELOPMENTS ACKNOWLEDGES AND Responds TO THESE LOCAL CONTINUITIES.

DESIGN SUGGESTION 5.1.6 – WHERE A WHOLE SHOPPING STRIP IS CONSIDERED TO BE OF HERITAGE VALUE, LOCATE LARGE-SCALE NEW DEVELOPMENT BEHIND SHOPS THEMSELVES.

For example, redevelop ground-level car parking that often exists behind shops. Ensure this large-scale development is well linked to the shopping strip, and is of a scale and design that responds to the finer detail of the heritage area.

ENVIRONMENTAL SUSTAINABILITY

OBJECTIVE 5.2
To minimise the energy consumption of new buildings.

DESIGN SUGGESTION 5.2.1 – DESIGN AND ORIENT BUILDINGS TO MAXIMISE NORTHERLY ASPECT AND SOLAR ACCESS IN THE COOLER MONTHS.

For example, include insulation, glazing and sun-shading devices and minimise west and south facing glazing.

DESIGN SUGGESTION 5.2.2 – MAXIMISE OPPORTUNITIES FOR ROOF-MOUNTED SOLAR DEVICES (SUCH AS SOLAR HOT-WATER SYSTEMS AND PHOTOVOLTAIC PANELS).

DESIGN SUGGESTION 5.2.3 – MINIMISE ENERGY USE BY MAXIMISING NATURAL LIGHTING AND VENTILATION.

DESIGN SUGGESTION 5.2.4 – INSTALL ENERGY-EFFICIENT LIGHTING AND APPLIANCES.

EXPLORE OPPORTUNITIES FOR REUSE OF EXISTING BUILDINGS.
OBJECTIVE 5.3
To minimise waste generation.

DESIGN SUGGESTION 5.3.1 – RECYCLE BUILDING MATERIALS, WHERE POSSIBLE.

DESIGN SUGGESTION 5.3.2 – ENSURE BUILDINGS ARE DESIGNED AND CONSTRUCTED SO THEY CAN ADAPT TO ACCOMMODATE A RANGE OF USES OVER TIME.

For example, incorporate high floor-to-ceiling heights to accommodate the possibility of subdividing the building in different ways and provide several access points.

DESIGN SUGGESTION 5.3.3 – PROVIDE ADEQUATE SITE STORAGE AND TRANSPORT ACCESS POINTS FOR SEPARATION OF RECYCLED MATERIALS.

OBJECTIVE 5.4
To minimise water consumption and stormwater run off from new buildings.

DESIGN SUGGESTION 5.4.1 – DESIGN TO MAXIMISE WATER RECYCLING OPPORTUNITIES AND MINIMISE IMPORTATION OF POTABLE WATER.

DESIGN SUGGESTION 5.4.2 – INCORPORATE WATER-SENSITIVE DESIGN PRINCIPLES TO MANAGE STORMWATER.

DESIGN SUGGESTION 5.4.3 – AMELIORATE PEAK FLOWS AND IMPROVE WATER QUALITY BEFORE DISCHARGING STORMWATER DIRECTLY INTO LOCAL CREEKS.

DESIGN SUGGESTION 5.4.4 – DESIGN LANDSCAPES THAT MAKE THE MOST OF WATER INFILTRATION AND RETAIN IT TO HELP PLANT MAINTENANCE.

DESIGN SUGGESTION 5.4.5 – PROMOTE LANDSCAPES WITH INDIGENOUS VEGETATION WHERE THIS CONFORMS TO AN ESTABLISHED PLANTING PATTERN, AND SUPPORTS THE OTHER PUBLIC SPACE QUALITIES OUTLINED IN THESE GUIDELINES (PARTICULARLY IN RELATION TO THE PROVISION OF EFFECTIVE SHADE IN PUBLIC SPACES).

For a more detailed guide to environmentally sustainable design and construction refer to Environmentally sustainable design and construction: Principles and guidelines for capital works projects (July 2003), DSE.
ELEMENT 6 MALLS AND LARGE STORES
Malls and large stores, such as supermarkets, are essential to the vitality of many activity centres, but their large expanse and blank rear and side walls can create visual and functional voids within an activity centre and its surrounding area. Poor integration of large stores can also adversely affect an activity centre’s economic and social performance. However, a well-designed mall or large store can enhance the viability of other businesses, promote a high level of street activity and provide a variety of services to the community. The key is to sensitively integrate the development into the context of surrounding uses.
INTEGRATING MALLS / LARGE STORES INTO ACTIVITY CENTRES

OBJECTIVE 6.1
To improve pedestrian and cycling access and amenity between malls/large stores and the rest of the activity centre and surrounding neighbourhood.

DESIGN SUGGESTION 6.1.1 – DESIGN MALLS/LARGE STORES TO FOCUS CONVENIENT AND DIRECT PEDESTRIAN MOVEMENT ON TRANSIT STOPS AND PROVIDE INTERCHANGE FACILITIES.
(See Element 2: Stations and Interchanges)

DESIGN SUGGESTION 6.1.2 – DEVELOP A PUBLIC DOMAIN OF NEW STREETS SERVING NECESSARY VEHICLE, WALKING AND CYCLING TRAFFIC THAT CONNECT THE MALL/LARGE STORE TO THE REST OF THE CENTRE.
Refocus mall developments to address these streets to ensure high quality pedestrian connectivity between all uses in the activity centre. Ensure these routes are overlooked and are lined with active frontages, and integrate into the activity centre's layout and structure.

DESIGN SUGGESTION 6.1.3 – MAKE USE OF NATURAL LIGHT IN INTERNAL PUBLIC SPACES IN MALLS TO CREATE PEDESTRIAN ‘STREETS’ THAT INTEGRATE MORE EASILY WITH SURROUNDING EXTERNAL STREETS.
For example, use arcade-style glazed roofs.

DESIGN SUGGESTION 6.1.4 – RECONNECT SURROUNDING RESIDENTIAL NEIGHBOURHOODS TO THE MALL/LARGE STORE BY MAKING CAR PARKING AREAS MORE COMPACT OR BY PUTTING THEM UNDERGROUND.
For example, introduce new uses such as higher density housing or other activity centre uses over the car parks where possible.

DESIGN SUGGESTION 6.1.5 – LOCATE CAR PARKS IN A WAY THAT MAINTAINS HIGH QUALITY PEDESTRIAN CONNECTIONS BETWEEN THE MALL/LARGE STORE AND THE REST OF THE ACTIVITY CENTRE.
For example, limit extensive ground level car parks which separate the mall / large store from the rest of the centre (see Element 8: Car Parking).

OBJECTIVE 6.2
To ensure malls and large stores address streets with active frontages.

DESIGN SUGGESTION 6.2.1 – DESIGN MALLS/LARGE STORES TO ADDRESS SURROUNDING STREETS BY BRINGING VISUAL ACTIVITY TO STREET EDGES.
For example, provide openings in large store facades to bring activity to the street.

DESIGN SUGGESTION 6.2.2 – ‘WRAP’ THE EDGES OF LARGE STORES WITH SMALLER SCALE USES THAT HAVE ACTIVE FRONTAGES (SUCH AS SPECIALTY SHOPS, OR SMALL OFFICES WITH FRONTAGES TO THE SURROUNDING STREETS).
Limit blank walls, car parks or service bays from facing streets and public spaces.
OBJECTIVE 6.3
To ensure that malls / large stores maximise the opportunity for an increased mix of use.

DESIGN SUGGESTION 6.3.1 – INTRODUCE A FULL RANGE OF COMPATIBLE ACTIVITY CENTRE USES THAT ARE INTERMIXED AND WELL CONNECTED, AND LIMIT SINGLE-USE DEVELOPMENTS.

Consider office, community, educational, residential and recreational uses.

DESIGN SUGGESTION 6.3.2 – UTILISE THE ROOF SPACE OF LARGE STORES FOR OTHER SMALLER SCALE USES.

Realise these development opportunities for residential and commercial development. Locate the entries and exits of these uses to address street edges.

OBJECTIVE 6.4
To integrate the built form of malls and large stores into activity centres and their surrounding neighbourhoods.

DESIGN SUGGESTION 6.4.1 – INTEGRATE LARGER STORE FRONTAGES WITH THE PREVAILING RHYTHM AND SCALE OF EXISTING FRONTAGES ALONG ASSOCIATED STREETS.

Articulate large buildings, both in volume and surface treatments, to reflect the existing scale in the street, particularly if adjacent to existing residential areas.

DESIGN SUGGESTION 6.4.2 – PROVIDE A SCALE TRANSITION BETWEEN LARGE CENTRE BUILDINGS AND THEIR SURROUNDING STREETS AND RESIDENTIAL AREAS.

DESIGN SUGGESTION 6.4.3 – USE HIGHER DENSITY HOUSING AS A TRANSITION TO ADJACENT EXISTING RESIDENTIAL AREAS TO REDUCE THE APPARENT SCALE AND IMPACT OF LARGE STORE BUILDINGS. (See Element 7: Higher Density Housing)

DESIGN SUGGESTION 6.4.4 – LOCATE LOADING BAYS AND SITE STORAGE AND ACCESS POINTS FOR WASTE COLLECTION AWAY FROM PUBLIC SPACES, STREETS AND RESIDENTIAL AREAS TO MINIMISE AMENITY ISSUES ASSOCIATED WITH COOKING EXHAUSTS, WASTE, PLANT ROOMS AND SERVICE VEHICLES.
ELEMENT 7 HIGHER DENSITY HOUSING
By providing higher density housing in activity centres, people are given the opportunity to live within walking distance of a wide range of quality services, job opportunities and public transport options. Such housing also provides natural surveillance of streets and improves the viability of a variety of businesses. However, it is important to ensure this new housing is integrated effectively with the existing built form to minimise its impact on existing residential areas.

The following guidelines provide general assistance on integrating higher density housing into activity centres. For more detailed guidance, please see Guidelines for higher density residential development (Department of Sustainability and Environment 2004).
HIGHER DENSITY HOUSING OPPORTUNITY

OBJECTIVE 7.1
To maximise higher density housing opportunities in activity centres.

DESIGN SUGGESTION 7.1.1 – CONSCIOUSLY DESIGN HOUSING INTO NEW DEVELOPMENTS, SUCH AS SHOP-TOP HOUSING, HOUSING OVER BIG STORES, AND BUILDING OVER CAR PARKS AND OTHER UNDER-UTILISED SITES.

DESIGN SUGGESTION 7.1.2 – ENSURE INITIAL, BUILT-IN CARRYING CAPACITY OF DEVELOPMENT IN ACTIVITY CENTRES PERMITS FUTURE FIRST AND SECOND FLOOR RESIDENTIAL DEVELOPMENT.

DESIGN SUGGESTION 7.1.3 – AMALGAMATE SMALL lots INTO LARGER SITES TO FACILITATE BETTER AND MORE EFFICIENT DESIGN RESULTS.

Minimise abrupt changes in the size of the neighbourhood's urban fabric.

BUILDING DESIGN

OBJECTIVE 7.2
To ensure the scale and form of higher density housing in activity centres are appropriate.

DESIGN SUGGESTION 7.2.1 – INTEGRATE NEW, HIGH-DENSITY HOUSING INTO THE LOCAL STREET SYSTEM AND AVOID GATED COMMUNITIES.

DESIGN SUGGESTION 7.2.2 – DESIGN BUILDINGS TO COMPLEMENT THE SCALE AND CHARACTER OF THEIR SURROUNDINGS.

Siting, mass and articulation of buildings need to respect valued elements of an area's local appearance.

DESIGN SUGGESTION 7.2.3 – ENCOURAGE THE LOCATION OF AS MANY INDIVIDUAL ENTRANCES TO HIGHER DENSITY HOUSING AS POSSIBLE ALONG EXISTING STREET FRONTAGES.

OBJECTIVE 7.3
To ensure good amenity for residents of higher density housing and the surrounding neighbourhood.

DESIGN SUGGESTION 7.3.1 – ENCOURAGE THE DESIGN OF HIGHER DENSITY HOUSING THAT INCREASES NATURAL SURVEILLANCE OF PUBLIC SPACES AND STREETS.

DESIGN SUGGESTION 7.3.2 – PROVIDE SEPARATE ENTRANCES TO RESIDENTIAL DEVELOPMENT IN MIXED-USE BUILDINGS RATHER THAN AGGREGATING ENTRY AT ONE OR TWO POINTS. AVOID SHARING ENTRANCES BETWEEN COMMERCIAL AND RESIDENTIAL USES.

DESIGN SUGGESTION 7.3.3 – PROVIDE ADJACENT OPEN SPACE OR WELL SIZED LANDSCAPED AREAS WITH GOOD SOLAR ACCESS.

These will contribute to local recreational needs.

DESIGN SUGGESTION 7.3.4 – LOCATE AND ORIENT RESIDENTIAL DEVELOPMENT TO AVOID ADVERSE AMENITY IMPACTS FROM EXISTING BUILDINGS AND ACTIVITIES, SUCH AS NOISE FROM EXISTING LOADING BAYS, PLANT ROOMS, ENTERTAINMENT VENUES, EXHAUST STACKS AND SERVICE PLANTS.
DESIGN SUGGESTION 7.3.5 – INCORPORATE ADEQUATE NOISE ATTENUATION MEASURES INTO BUILDINGS.

DESIGN SUGGESTION 7.3.6 – MINIMISE ADVERSE AMENITY EFFECTS OF NEW DEVELOPMENTS ON ADJACENT USES, PARTICULARLY RESIDENTIAL.

Consider over-shadowing, noise (such as from truck delivery areas and waste collection) and odours (from cooking exhausts and bin storage). Attenuate their effects and locate them away from residences.

SURROUNDING RESIDENTIAL NEIGHBOURHOODS

OBJECTIVE 7.4
To integrate the activity centre into the surrounding neighbourhoods.

DESIGN SUGGESTION 7.4.1 – COMPREHENSIVELY PLAN, DESIGN AND MANAGE THE INTERFACE WITH RESIDENTIAL AREAS TO ENSURE BUILT FORM AND STREET LEVEL LINKAGES ARE CONTIGUOUS WITH THE CENTRE.

Prevent under developed parcels of land, such as service yards and parking lots, from blighting the edge of the activity centre.

DESIGN SUGGESTION 7.4.2 – ORIENT DEVELOPMENT TO OVERLOOK FOOTPATHS AND ROADWAYS TO ENSURE A SAFE PEDESTRIAN ENVIRONMENT.

Design windows to face the street and avoid high, solid front fences or hedges to improve surveillance.

DESIGN SUGGESTION 7.4.3 – ORIENT DEVELOPMENT WITH RESIDENTIAL USES AT GROUND-FLOOR LEVEL TOWARD PREDOMINANTLY RESIDENTIAL STREETS.

OBJECTIVE 7.5
To ensure higher density housing sensitively responds to the surrounding neighbourhoods.

DESIGN SUGGESTION 7.5.1 – ARTICULATE BUILT FORM TO COMPLEMENT THE SCALE AND APPEARANCE OF SURROUNDING RESIDENTIAL AREAS AND THE IDENTIFIED PREFERRED CHARACTER.

For example, provide a new transition from the built–form scale of the centre to that of adjoining residential areas, ensuring that new buildings at the interface do not physically overwhelm or intrude on the reasonable privacy of low-rise residential surroundings.

DESIGN SUGGESTION 7.5.2 – PROVIDE A GRADUAL TRANSITION FROM EXISTING FRONTAGE SETBACKS OF SURROUNDING RESIDENTIAL BUILDINGS.

DESIGN SUGGESTION 7.5.3 – RETAIN A SYMPATHETIC VISUAL SETTING AND RELATIONSHIP WHEN BUILDING ADJACENT TO HERITAGE BUILDINGS AND ELEMENTS.

For example, height, form and setbacks for new development should be complementary.

DESIGN SUGGESTION 7.5.4 – WHERE THE GARDEN AND LANDSCAPE CHARACTER OF THE EXISTING RESIDENTIAL AREA IS A VALUED CHARACTERISTIC, DESIGN A LANDSCAPE SETTING THAT CONTRIBUTES TO IT.
ELEMENT 8 CAR PARKING
Car parks are often poorly designed and located, and create unpleasant and potentially unsafe environments, and pedestrian barriers between different developments and the surrounding neighbourhood. Car parks must be available for an activity centre to remain viable, though the efficacy of their use, and their location and design can be improved to ensure pedestrian and cycling environments are not degraded. In many instances, they offer a substantial opportunity for the activity centre to be better integrated into the surrounding neighbourhood.
ON-STREET CAR PARKING

OBJECTIVE 8.1
To maximise on-street parking opportunities.

DESIGN SUGGESTION 8.1.1 – ENCOURAGE ON-STREET CAR PARKING THROUGHOUT THE ACTIVITY CENTRE, TO CALM VEHICLE SPEEDS, ENHANCE THE PERCEPTION OF SAFETY FOR PEDESTRIANS AND MINIMISE THE NUMBER OF OFF-STREET CAR PARKS REQUIRED.

DESIGN SUGGESTION 8.1.2 – TAKE STEPS TO LIMIT THE IMPACT OF NON-LOCAL TRAFFIC AND PARKING ON SURROUNDING RESIDENTIAL STREETS.

DESIGN SUGGESTION 8.1.3 – ENSURE LOCAL AREA TRAFFIC MANAGEMENT IS CYCLE AND PEDESTRIAN FRIENDLY.

OBJECTIVE 8.2
To use on-street parking efficiently.

DESIGN SUGGESTION 8.2.1 – CONSIDER INSTIGATING TIME LIMITS THAT DISCOURAGE WORKERS FROM USING THE SPACES CLOSEST TO THE SHOPS TO ENSURE THE GREATEST TURNOVER OF THE MOST CONVENIENT SPACES.

DESIGN SUGGESTION 8.2.2 – SHARE BICYCLE AND CAR PARKING FACILITIES FOR RESIDENTIAL DEVELOPMENT AND OTHER ACTIVITY CENTRE USES.

OFF-STREET CAR PARKING

OBJECTIVE 8.3
To minimise off-street car parks visually dominating public space.

DESIGN SUGGESTION 8.3.1 – PLACE OFF-STREET CAR PARKING UNDER RESIDENTIAL AND OTHER DEVELOPMENTS.

DESIGN SUGGESTION 8.3.2 – ENSURE GROUND-LEVEL STREET FRONTAGES ARE NOT USED FOR CAR PARKING BUT RATHER HAVE ACTIVITY AND INTEREST FOR PEDESTRIANS.

DESIGN SUGGESTION 8.3.3 – USE LANDSCAPING TO SCREEN HALF-BASEMENT CAR PARKING FROM THE STREET AND PUBLIC SPACES.

DESIGN SUGGESTION 8.3.4 – MINIMISE THE TOTAL NUMBER OF CAR PARKS REQUIRED BY SHARING BICYCLE AND CAR PARKING FACILITIES BETWEEN DIFFERENT USES WITHIN MIXED USE DEVELOPMENTS.

Take advantage of differing periods of demand for parking by different users.
A MULTI-STOREY CAR PARK CAN STILL MAINTAIN STREET ACTIVITY WITH RETAIL SHOPFRONTS ON THE GROUND FLOOR, AND RESIDENTIAL DEVELOPMENT ON THE UPPER LEVEL THAT OVERLOOKS THE STREET.

OBJECTIVE 8.4
To improve pedestrian and cycling safety and amenity in and around off-street parking.

DESIGN SUGGESTION 8.4.1 – DIRECTLY LINK THE CAR PARK TO THE SHOPS IT SERVES BY PEDESTRIAN ROUTES LINED BY ACTIVE FRONTAGES.

DESIGN SUGGESTION 8.4.2 – ENCOURAGE NATURAL SURVEILLANCE OF OFF-STREET CAR PARKS.

Avoid car parks edged by blank walls.

DESIGN SUGGESTION 8.4.3 – ENSURE GROUND-LEVEL CAR PARKS HAVE CONTINUOUS BUILT EDGES WITHOUT RECESSES, WHERE POSSIBLE.

DESIGN SUGGESTION 8.4.4 – PROVIDE FOOTPATHS AROUND THE BUILT EDGES OF GROUND-LEVEL CAR PARKS.

DESIGN SUGGESTION 8.4.5 – ENSURE THE CAR PARK IS WELL LIT WITH A HIGH QUALITY ‘WHITE LIGHT’ AND CLEARLY SIGNED.

DESIGN SUGGESTION 8.4.6 – PLANT TREES TO PROVIDE SHELTER AND OFFER AN ATTRACTIVE APPEARANCE TO GROUND-LEVEL CAR PARKING.

DESIGN SUGGESTION 8.4.7 – PLACE BICYCLE PARKING UNDER COVER AND, WHERE POSSIBLE, WITHIN 20 METRES OF BUILDING ENTRANCES.

HALF-BASEMENT CAR PARKING CONCEALED BEHIND SCREEN PLANTING MAINTAINS A PLEASANT PEDESTRIAN STREET ENVIRONMENT.
GLOSSARY OF TERMS

**Active Frontages**
Refers to street frontages where there is an active visual engagement between those in the street and those on the ground floors of buildings. This quality is assisted where the front facade of buildings, including the main entrance, faces and open towards the street.

**Activity Centres**
Activity centres are the traditional focus for services, employment and social interaction in cities and towns. They are where people shop, work, meet, relax and often live. Usually well served by public transport, they range in size and intensity of use from local neighbourhood strip shopping centres to traditional town centres and major regional malls.

**Arterial Roads**
Arterial roads are the principal routes for the movement of goods and people within an area’s road network. Arterial Roads have traditionally been further divided into primary and secondary arterials. Secondary arterials supplement the primary arterial roads by providing for through-traffic movement to a determined carrying limit that is sensitive to roadway characteristics and abutting land uses. (Ref: VicRoads traffic engineering manual, vol 1).

**Fine Grained Street System**
A street and block pattern that encourages more intensive pedestrian use by ensuring parallel streets are spaced no more than 80 - 100 metres from each other, and each block has a perimeter no greater than 400 metres. Evidence of common pedestrian behaviour suggests larger blocks discourage regular pedestrian use and therefore reduce street activity.

**Gated Community**
Residential development that is entered via a code operated security gate only. Gated communities are segregated by closing streets, or walling off suburbs to improve perceived safety inside a development.

**Half-Basement Car Park**
Car parking areas where the ground floor of the building is elevated approximately 1.5 metres above ground level – usually to provide ventilation to the car park or reduce excavation costs.

**Integration**
The spatial and functional linking of areas of development and their inhabitants. Integrated areas form a coherent physical whole where, in liveability terms, the whole is greater than the sum of its parts.

**Mixed Use Development**
Good mixed use development involves the fine-grained mixing of compatible land uses in a balanced mix. Physically, it includes both vertical and horizontal mixes of use. No single use should dominate other uses, and residential land use should generally not exceed 60% of the land use.
Municipal Bicycle Network
The Municipal Bicycle Networks (MBNs) are networks of local bicycle routes in metropolitan Melbourne and in regional Victoria. The local council is the custodian of each MBN and has the primary responsibility for managing its development.

Natural Surveillance
‘Eyes on the street’ provided by local people as they go about their daily activities – this can deter anti-social behaviour and make places ‘feel’ safer.

Photovoltaic Panels
Photovoltaic panels are devices that convert light into electricity. Photovoltaic panels rely on the photovoltaic effect to absorb the energy of the sun and cause current to flow between two oppositely charged layers.

Public Spaces
Refers to spaces that are publicly owned and which are intended for use by the public; and spaces that are privately owned but encourage public use free of any imposed rules or constraints on normal public behaviour.

Principal Bicycle Network
The Principal Bicycle Network (PBN) is a network of arterial bicycle routes in metropolitan Melbourne. VicRoads has primary responsibility for managing the development of the PBN. The PBN currently consists of 2400 kilometres of existing and proposed on-road and off-road bicycle routes. So far, approximately 600 kilometres of the network have been completed.

Principal Public Transport Network
Melbourne 2030, the State Government’s plan to preserve Melbourne’s liveability, sets out the Principal Public Transport Network (PPTN). The PPTN is a high-quality public transport network that connects the Principal, Major and Specialised activity centres. It contains all train and tram routes as well as selected bus routes that are to be progressively rolled out as SmartBus services. The PPTN, together with local feeder services, provides for a comprehensive, efficient and networked public transport system for the metropolitan area.

Street Enclosure
The use of buildings and regularly spaced large street trees to create a sense of defined public space in the street. Often a sense of left-over space has resulted from piecemeal development, where buildings that are set well back from the street and relate poorly to each other in scale.

Structure Planning
Structure planning is the process of developing a long-term planning framework to ensure integrated development of activity centres. Councils are required to undertake structure planning for all of their Principal, Major and Specialised activity centres.

White Light
Illumination produced from lamps with a correlated colour temperature of at least 3700K in major streets and public places, or 3000K in minor streets or spaces.
FURTHER READING

The following information has been provided to assist local government in planning and designing activity centres. It is in no way an exhaustive list, nor does the Department of Sustainability and Environment necessarily endorse any of the information listed. The information provided is intended as a general guide only.

GENERAL

- Planning practice notes: <www.dse.vic.gov.au/planning> (under the planning system ‡ planning practice notes).
- Incorporated documents common to all planning schemes: <www.dse.vic.gov.au/planning> (under the planning system ‡ planning schemes ‡ incorporated documents).

TRANSPORT

Cycling

- Austroads guide to traffic engineering practice, part 14 – bicycles.
- Cycle notes: <www.vicroads.vic.gov.au> (under VicRoads information for ‡ cyclists ‡ providing bicycle facilities ‡ cycle notes).
- Better local traffic controls for safer cycling and walking (Bicycle Victoria 2004): <www.bv.com.au> (under campaigns ‡ Toolbox- bike facility design ‡ local streets for walking and cycling).
- It can be done – a bicycle network on arterial roads (Bicycle Victoria): <www.bv.com.au> (under campaigns ‡ Toolbox- bike facility design ‡ It can be done).
Road user safety


Public transport

- *Resource kit for public transport on roads* (available from VicRoads bookshop) containing:
  - Bus stop guidelines (draft)
  - Tram stop guidelines (draft for discussion)
  - Bus priority guidelines (draft)
  - Tram priority guidelines (draft for discussion).
- *Design for trucks, buses and emergency vehicles on local roads* (November 1998).
- *Designing local roads for ultra low floor buses* (July 1999).

Traffic noise

- *A guide to the reduction of traffic noise* (VicRoads bookshop).
  Volume 1: Traffic management
  Volume 2: Signs and markings

Pedestrian access


For further information relating to public transport, please contact Public Transport Division, Department of Infrastructure, ph: 9655 6500.

For further information relating to road-based public transport, email: Rbpt@roads.vic.gov.au

AMENITY

- Australian Standards: <www.standards.com.au>
ENVIRONMENTALLY SUSTAINABLE BUILDING AND DESIGN


SAFETY

- Design guidelines for a safer Victoria: <www.dse.vic.gov.au/planning> (under the planning system ‡ urban design).

HERITAGE


DISABILITY ACCESS

Nationally, there are three significant regulations that govern access for people with disabilities:
- Disability Discrimination Act 1992
- Building Code of Australia
- Australian Standards (particularly AS 1428 – Design for access and mobility).
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