URBANDESIGN GUIDELINES For Commercial Development





Purpose of the Commercial Urban Design Guidelines

The purpose of this guide is not to show you how to design, but how to think about design. The commercial urban design guide aims to improve the quality of commercial development in Whangarei. It provides a set of outcomes and best-practice urban design guidelines and illustrates their application.

This document is intended to assist developers, landowners, Council staff and the wider community toward best-practice urban design. It aims to encourage developers and designers to look beyond the minimum standards and consent requirements of the District Plan and engineering standards to explore opportunities that will create a better quality urban environment.



Commercial Urban Design Guidelines



The commercial urban design guidelines cover commercial development.

For mixed use development (which contains residential and commercial land uses) both documents should be considered.

Residential Urban Design Guidelines



The residential urban design guidelines cover subdivision and medium-to-high density urban design guidance.

The principles and guidance within this document can be applied to lower density housing, but are primarily focused on higher density residential development where everything and everyone is in closer proximity, therefore quality design becomes more important.

Contents Page

iii Purpose of the Commercial Urban Design Guidelines

01 Introduction

- 02 What is Urban Design?
- 04 The benefits of good Urban Design
- 06 Purpose of the Guidelines
- 08 How to use the Commercial Urban Design Guidelines
- 10 Key Outcomes

12 1. Site & Context Analysis

18 2. Site Design

- 20 2.1 Context Integration
- 26 2.2 Movement & Connectivity
- 30 2.3 Landform & Typography
- 34 2.4 Ecology & Habitats
- 38 2.5 Stormwater & Hazards
- 42 3. Position on Site
- 44 3.1 Building Placement
- 50 3.2 Building & Site Access
- 54 3.3 Outlook & Natural Light
- 58 4. Form & Appearance
- 60 4.1 Building Mass & Height
- 64 4.2 Facade Design
- 70 4.3 Building Roofline

74	5. Response to the Street
76	5.1 Active Frontage
82	5.2 Public vs. Private
86	5.3 Building Verandah
90	5.4 Building Signage

96 6. Outdoor Spaces

- 98 6.1 Public Space & Street Desgin
- 102 6.2 Crime Prevention & Public Safety
- 110 6.3 Landscape Design
- 116 6.4 Service Areas

122 7. Positioning Vehicles

- 124 7.1 On-Site Carparking
- 130 7.2 Access & Wayfinding
- 136 7.3 On-Street Carparking
- 140 7.4 Bicycle Use & Parking
- 144 7.5 Carpark Landscaping

148 8. Building Design

- 150 8.1 Internal Access & Layouts
- 154 8.2 Building Performance

What is Urban Design? Urban design is more than building

design. It is the integration of all aspects that create a place.

There is often the perception that urban design is about aesthetics. Although aesthetics are a part of it, urban design is about creating functional and attractive places and creating positive outcomes socially, environmentally, economically and culturally for people and their surroundings.

A well designed place is unlikely to be achieved by focusing only on the appearance of buildings. A place is more complex than a building; it is made up of the context, spaces, buildings, networks and communities. It is the setting for a diverse range of uses and activities and is experienced by people of many ages and abilities in different ways.

Consideration of urban design and amenity at an early stage within commercial development is important in creating quality places.





Building Design vs. Urban Design

Urban design is not just about the appearance of the building.

Urban design is the integration and relationship between all the different aspects that make up a place.

The benefits of good Urban Design

Whangarei's city centre and local commercial centres are traditionally the focal point for shopping and economic activities. Due to challenges in our urban environments and the changing nature of retail, they are becoming more than places where shops and services are located.

Commercial areas are the hub of communities and cities, a place of experience and a venue for public life and social interaction. Commercial buildings and how they interact with the spaces around them adds to this vibrancy, bringing people to the space and encouraging them to stay.

A well designed commercial environment can make a big difference to how we experience, use and value our city. Commercial development should complement its surroundings and make a positive contribution to the built environment and the adjacent spaces. This design guidance considers the design of buildings, places and networks that make up our commercial areas so they work for all of us, both now and in the future.

Good Urban Design can:

- Create higher returns on investment and rentals.
- Reduce management and maintenance costs.
- Promote more productive workplaces.
- Enhance a place's image and prestige.
- Enhance public safety and reduce crime.
- Enhance energy efficiency
- Create more opportunities for recreation and social interactions.
- Create a more attractive and vibrant place for people to visit.
- Improve visual and pedestrian connections between places.

Projects with good urban design may entail a larger investment, upfront, but will be more profitable for developers in the long term as they add to the overall value of the development and contribute positively to the wider environment.



Purpose of the Guidelines

The commercial urban design guidelines are intended to:

- Be educational and informative, providing a tool-kit for best practice commercial design.
- Complement the Whangarei District Plan. They can be used to assist in the interpretation of the provisions (objectives, policies, rules and assessment matters) relating to urban development which require resource consent.
- Be a visual document that is easy to follow and easy to understand to help ensure it is an accessible tool for all.
- Encourage early engagement with Whangarei District Council.
- Set a baseline for good quality design while still encouraging innovative and creative solutions to meet the desired outcomes.
- Be applied to all commercial development, office and retail buildings within Whangarei. This includes mixed use development and commercial development within or next to residential areas.

Relationship to District Plan

The guidelines are a non-statutory document, which means they do not have legal weight under the Resource Management Act. This has both advantages and disadvantages. The advantages of this approach include:

• The guidelines can be easily changed or updated, if required.

- They are easier to read as they do not have to be drafted in a language or style that would be expected from a statutory document.
- They are not subject to what can be lengthy and costly RMA processes.
- There is flexibility in how the guidelines are used and interpreted.

The main disadvantage is that, because the guidelines are not statutory under the Resource Management Act, there is limited ability to use them to support decision making through the resource consent process.

In balance, a non-statutory approach was considered to give a better opportunity to positively influence the design of new development. The guidelines are not intended to inform just the consent process, but should be used at the earliest stage of the design process to capture the strategically important aspects of a development's design (see design guideline structure).

Certain principles within the design guidance are proposed to be incorporated into the District Plan objectives, policies and rules through the plan change process. This means certain aspects relating to amenity will trigger a resource consent and encourage people to use the design guidelines to better understand how certain policies and rules can be achieved. They will also help inform future changes, urban design and amenity principles, policies and rules within future plan changes.



Early Engagement

There are tight processing timeframes on consent applications for both Council and applicants. Normally there is a limited time for being able to change a consent application once it has been lodged, and Council wishes to make the process more efficient by encouraging pre-lodgement meetings. Pre-lodgement meetings are important in making the consent process faster and cheaper for applicants. They allow Council to make sure that development applications are complete and respond positively to this guide and to their urban context.

Prior to any design work, applicants should meet and discuss the proposal with planning staff. Being able to provide information about the site and its surrounding context is important. This helps officers to quickly understand what is being proposed and allows them to make recommendations under the guidelines.

By the time a formal application is lodged there will ideally be a high degree of agreement between planning staff and the applicant regarding the site's context and the design proposal. The intention is to avoid the need for additional information to be sought on the proposal once the application has been lodged.

Engagement with Tangata Whenua

Whangarei District Council encourages engagement with Tangata Whenua and hāpu early on in the design process, working collaboratively to develop a response to māori cultural values and narratives. Council is committed to working with hāpu to develop more formalised hāpu design guidelines which will work alongside and be complimentary to this document. In the absence of these we recommend using the Te Aranga Māori Design Principles.

How to use the Commercial Urban Design Guidelines

Development should focus on what has the greatest impact and achieves the key outcomes.

This document recognises that within the step-by-step guidance there may be contradicting and varying concepts which when put into practice can work against one another.

It is hard to achieve commercial development which is entirely best practice design and it can be difficult to understand what principles and concepts should be prioritised.

The commercial urban design guidelines have been structured around this inverted triangle to encourage prioritisation of aspects that are larger scale, more strategic and create the greatest impact.



Desired Outcomes

Understanding and achieving the desired outcomes is key to good commercial development.

This document recognises that design is subjective and there are various design solutions that can be applied to commercial development. The commercial urban design guidelines set a baseline for good quality design. They do not aim to impose rules on new development or prescribe specific design solutions.

Achieving the outcomes set out in this plan is more important than following the stepby-step guidance. However, departure from these guidelines will require a demonstration that the proposal achieves the following desired outcomes.

1. DISTINCTIVE

A distinctive place is compatible with, reflects and enhances its individual character. It celebrates the people, heritage and landscapes that distinguish it from other places. Within urban design it is important to recognise that character is dynamic and evolving, not static.

Benefits

- Buildings and public spaces are unique, appropriate to their location, and add value to the community.
- Protection and enhancement of heritage (buildings, places, stories and history).
- Protection and enhancement of distinctive landforms, water bodies, habitats and ecologies.
- Communities connect both physically and visually to natural features.
- Local identity is preserved and treasured by the community.
- Celebration of Whangarei's rich Maori and European history uncovered and given meaning.
- Avoids standard solutions and encourages creativity and innovation through design.

2. CONNECTED

Connectivity creates places that are easy to get to and move through for all, regardless of age and/or ability. Well connected places have a clear image, are easy to understand, promote safety and create vibrant, healthy communities and environments.

Benefits

- Safe, clear and easily navigable routes that are accessible for all.
- Facilitates movement and therefore exchange of people, goods and services.
- Facilitates public transport and more active modes of transport such as walking and cycling. Reduces dependence on cars and thereby reduces air pollution.
- Increases pedestrian activity between adjacent buildings, streets and public spaces, making them safe and feel safer.
- Increases choice in terms of travel route and modes of travel.
- Increases productivity due to savings in travel time, cost and improved health.
- Creates connections to our environment, both physically and visually, through landmarks, focal points and walking tracks.

3. ATTRACTIVE

A place that is well designed and attractive creates public spaces and routes that are vibrant, functional, pleasant to use and well looked after. Attractive places encourage creativity, socialisation, experience, economic exchange and are inclusive.

Benefits

- Creates a feeling of safety and security.
- Well designed, functional and easy to maintain.
- Fosters creativity and innovation in the design of public spaces, art works, buildings and landscapes.
- Creates a vibrancy and increases economic viability of urban development.
- Creates a strong sense of place.
- Helps attract people to live, work and play in our urban environments.
- Incorporates the natural, historical and cultural values of the community.

4. INCLUSIVE

A place that is inclusive allows everyone to participate in public life regardless of age, ability or background. It is considerate of change across a person's lifespan, offering choice and providing options when it comes to where they shop, what they do and where they live. It allows everyone to establish a sense of belonging to a place.

Benefits

- Places are physically accessible to everyone regardless of age, ability or background.
- The creation of focal points for activation, social interaction and diverse communities and cultures.
- Creates a place that is comfortable for everyone to navigate, use and enjoy.
- Creates a mix of uses, things to do and see which are suited to the needs of everyone and accessible to all.
- Creates a safe environment which is vibrant and activated throughout the day, night and year.
- Provides access to a mix of lifestyle choices and amenities, and a variety of layout, building form and architectural styles.

Sustainable design seeks to reduce the negative impacts on the environment and improve the comfort of people through the creation of healthy and productive environments. Buildings and spaces should be flexible and enduring, and the natural environment should be enhanced and protected.

5. SUSTAINABLE

Benefits

- Creates low cost, low impact development, waste minimisation and lower maintenance costs.
- Protects and enhances the natural environment, habitats and ecological systems.
- Creates increase in active modes of transport and reduction in traffic congestion and improvements in air quality with less dependence on vehicles.
- Connects people back to the environment to foster a sense of place and protection.
- Provides relief from hard urban spaces.
- Improves the comfort and productivity of people and users.
- Creates buildings and spaces that are adaptable to a variety of present and future uses and users.

STEAND CONTEXT

Before the development of a commercial building begins, it is important to consider not only the site, but its wider context. This includes the place, street, neighbourhood and wider city. New development will always bring changes, and how well a development considers, fits in, or betters its surroundings will have an impact of the quality of the wider environment and the well-being of people. Whangarei District Council recognises that the one-size-fitsall approach is not the best for a district with a wide variety of environments.

Each site has its own distinctive set of qualities that give it its own unique character, constraints, qualities in need of protection and opportunities that can help shape a development for the better.

When analysing a site and its context it is important to consider the aspects that make up a place. Therefore, as well as an understanding of the tangible characteristics of a place, it is important to consider the people, their history, their diversities, and their needs.

Effective placemaking maximises local assets, inspiration and potential and results in the creation of quality public spaces that contribute to people's health, happiness and well-being.

Development that is place-led should:

- Respond to the character of a place its natural features, land use patterns, built form, history and heritage and its views and gateways.
- Be meaningful to people emotionally and spiritually.

- Consider the needs of the community and provide adequate demand for proposed uses.
- Be attractive to people through quality design, art and choice of experiences.

It's important to consider these aspects through a thorough analysis of the site.

Site and Context Analysis

Before the design work begins it is important to prepare a thorough analysis of the site and its context. This analysis can be a useful tool to identify the natural, cultural and urban features of a site and its surrounds, recognise the site's limitations as well as building on its potential contribution to sense of place.

A site analysis helps the applicant consider what kind of design might work for the site, as well as showing Council planning staff that the proposal has been carefully thought through.

At a minimum, consider the area within 400m (five minute walk) of the site. Analysis could, however, go beyond this to a city or district-wide level.

Community and demographics:

• An analysis of the community, demographics and economic viability of the proposed commercial use. Good outcomes cannot be achieved if the site is not appropriate for the proposed use.

Connections and movement:

- Location of roads, walking and cycling routes.
- Traffic flow (arterial or local roads, traffic volumes).
- Public transport routes and locations.
- Access points to site for vehicles, pedestrians and cyclists.
- Pedestrian desire lines through the site.
- Key links to surrounding destinations and amenities.
- Views from the site as well as views to the site that are a potential privacy issue.

Land uses:

- Surrounding land uses (commercial, residential, open space etc.).
- Density and typologies.
- Incompatible uses, or areas of reverse sensitivity.

Place and character:

• Heritage building and other culturally significant sites.

- Surrounding amenities, attractions such as public space and public buildings.
- Future development areas.
- Existing buildings on site and on-site features.
- Surrounding built form (e.g. is there a consistent building line, style of building or architectural feature's).
- Surrounding active edges.
- Existing infrastructure.
- Private open space of surrounding sites.

Natural features:

- Site topography
- Significant vegetation
- Solar orientation and prevailing winds.
- Note relevant natural hazards such as flooding, erosion, ground contamination.

The analysis could include illustrated, photographic and written material to explain the physical influences and constraints of the site and show how this informs the design response.

Engage tangata whenua at the beginning of the project for guidance on how to appropriately respond to Maori cultural values. This response should be demonstrated.



KEY

Land Use

1 1

Proposed Site

Residential

Commercial

Green Spaces

Arterial Road

Local Roads

Movement & Connections

Primary Retail

Context Analysis (Neighbourhood Analysis)





Site Analysis (direct surroundings and site considerations)

SITE DESIGN

Once the site analysis is completed it is important to consider the existing site conditions and the development's future connections and use. The site design should create a coherent development with good quality buildings, public spaces and movement networks. Having an understanding of the existing context and site features allows the building to fit in but remain unique.



CONTEXT INTEGRATION

Chapter Objectives

- The development relates to the surrounding context including buildings, streets, public space, and future development.
- The activity within the development is compatible with the surrounding land uses to ensure they benefit from each other and the surrounding area.
- Where incompatible activities are placed in close proximity, reverse sensitivity issues have been considered for all users



A lack of investigation and consideration of the current and future context of the site can lead to a building appearing out of place and disconnected from its surroundings. Use the findings from the site analysis to help the development better integrate and connect to its context, both physically and visually.

> Distinctive Connected Attractive Inclusive Sustainable

Guideline 1

Aim to take a place-based approach to the development, responding to both the current and future context and the authentic characteristics of the specific site location and its surroundings.

Rules of Thumb

 Assess what aspects of the current character should be protected and enhanced. Where character within the area is limited, set a precedent for future development.

Guideline 2

If plot amalgamation is undertaken, respect the existing street patterns and block sizes, as large buildings and sites can alter the scale of an area and break down the traditional urban grain.

When amalgamating sites, respect the existing urban grain and plot sizes.



Guideline 2 If the development is large, use the building mass and design to maintain an appropriate building scale.

Guideline 3

Consider the surrounding land uses compatibility with the type of activity you wish to develop, or whether the development will have negative effects (i.e. high noise levels) on its surroundings, or vice versa.

Rules of Thumb

Group similar activities near each other to create areas of activity, shared infrastructure, and healthy competition. However, a balance between compatible uses and diversity should be considered.



Guideline 3 Consider surrounding land uses prior to building commercial development.

Guideline 4

Provide buffers to separate less compatible uses. This could include:

- Placing a building between incompatible uses.
- A separating floor for incompatible uses within the same building.
- Parts of buildings, such as well insulated exterior walls, or double glazed windows.
- Creating distance through central courtyards.
- Landscape features such as trees.
- Strategically locating windows and doors away from incompatible uses.
- Changes in ground level within the development.
- Specialised building materials and methods to reduce effects of noise, vibration, odour or dust.







Create a buffer by placing

a floor between

incompatible uses.

INCOMPATIBLE

USES

BUFFER

Position Windows away from an incompatible use, such as windows into private spaces away from public open spaces.

Raising the ground floor level and sill height can allow views out of the building but limit views in.

Raised

Ground Floor

Guideline 4 Diagrammes showing buffers to separate incompatible uses. Incompatible uses can include different activities as well as public and private.

Guideline 5

Consider possible building placement of adjacent undeveloped sites to ensure your commercial development does not compromise them.



Think about the most likely placement of buildings, windows and service areas on adjacent sites which are not yet developed.

Guideline 5 Consider neighbouring sites which are undeveloped.

Guideline 6

Consider elements of place and context which could help the development fit into the area and reinforce a sense of place. These could include:

- The height, mass, scale, building line and orientation of surrounding buildings.
- The setback of existing buildings.
- Building elements and built features such as entranceways, roof shape and overhang, verandahs, balconies and window details.
- Heritage buildings or heritage character.
- Historical or cultural narrative of the area.
- Natural features on or around the site.

Rules of Thumb

• Avoid repeating bad design elements such as blank walls along public edges.

Guideline 6 (above right)

The Quest hotel, although a new building, maintained the same scale and character as historic buildings on Bank Street.

Guideline 6 (below right)

Buildings along Queen Street in Auckland maintain the same setback.



Guideline 7

Consider significant views from the site, and protect views or connections from the wider area to, or past the site.

Guideline 7 Aim to make the most of significant views while being considerate of neighbouring developments.

Guideline 8

The development should respond positively to existing public spaces, streets and other outdoor spaces.



Guideline 8 Aim to visually and physically connect the development to streets and public spaces.

Guideline 9

Take advantage of visual and physical connections to existing features to create landmarks, aid legibility and add to the character of the development. This could include rivers, water bodies, hills, coast, significant vegetation, public spaces, important buildings and public art.



Guideline 9 The hills surrounding Whangarei City centre (such as Parihaka) are a significant part of the city's character and create a key landmark.

MOVEMENT & CONNECTIVITY

Chapter Objectives

• The design and layout of the development creates and/or maintains connectivity between key amenities for all movement types.



Movement is at the heart of the urban experience and generates life and activity. Having well connected spaces gives people choice, facilitates more movement and economic exchange, and makes places safer, more vibrant and inviting by bringing activation and passive surveillance to the area.

> Distinctive Connected Attractive Inclusive Sustainable

Guideline 1

Design streets or movement networks to accommodate a variety of transport modes creating a balanced and accessible network for pedestrians, cyclists and vehicles as well as other active modes of transport.



Guideline 1 Bank Street, Whangarei. Bicycle parking encourages cycling in commercial environments.

Guideline 2

Aim to connect to the existing movement network as much as possible by:

- Creating links to the surrounding street network and pedestrian paths.
- Linking pedestrian routes to public transport routes and stops.
- Creating balanced movement networks by ensuring pedestrians, cyclists and vehicles work together.
- Incorporating existing pedestrian desire lines into the design in the form of through-routes.
- Maintaining direct and convenient vehicle connections into and out of the site.

The development should aim to connect to the existing

Be considerate of the user experience and pedestrian

movement network as much as possible.

desire lines when designing connections.

Guideline 2 (above right)

Guideline 2 (below right)





TRANSPORTED INTO A City Conditions

Guideline 3

Aim to create connections which are short and direct, unless not possible due to natural features, ecological areas or topography.

Rules of Thumb

• Connectivity can be increased by providing choices in route to the site, within it, and to surrounding amenities.



Guideline 3 Provide choice in route to the destination as well as making the routes as short and direct as possible.

Guideline 4

Encourage walkability by:

- Linking pedestrian routes to public transport routes (existing and future) and local amenities and open space.
- Creating attractive streets with wide footpaths and planting on both sides of the street.
- Accommodating multiple modes of transport onto the street network to enhance activity, safety and the perception of safety.
- Activating the street by orientating commercial development towards the street or pedestrian environments, and ensuring they are overlooked.
- Designing for all ages and abilities, including wheelchair users, children, elderly and parents with prams.
- Incorporating existing pedestrian desire lines into the design in the form of through-routes.

Guideline 4 (above right) Avoid separating modes of transport as activity creates surveillance and makes places safer.

Guideline 4 (below right) Hatea Loop Walkway, Whangarei. Create paths which are accessible for all, regardless of age or ability.





Traffic calming can be achieved through:

- Changing carriageway widths. .
- Creating tighter kerb line radii.
- Traffic islands in key locations.
- Trees and planting.
- Using a variety of textures and surfaces. .
- Using flush medians only on very busy streets.
- Promoting slow speeds at intersections and road entrances.
- Introducing temporary measures to test ideas (tactical urbanism).
- Building up to the street edge, and • introducing on-street parking to create a sense of enclosure.







Guideline 5 (above) New York City, United States. Street trees create a sense of enclosure and provide amenity to buildings and pedestrians.

Roads with edge treatments, no

flush median and on-street

parking reduce the sense of space and make vehicles more

wary of their speeds.

Parkina

Guideline 6

Allow pedestrians to cross roads comfortably without needing to stray from their route to reach a crossing point.



LANDFORM & TOPOGRAPHY

Chapter Objectives

• The design and layout of the development responds to the existing landform and minimises any changes or earthworks needed.



Distinctive Connected Attractive Inclusive Sustainable

Guideline 1

Avoid major changes to existing natural landforms. Where possible, work with the existing landform and take advantage of the slope of the land by:

- Utilising the slope for basement parking.
- Utilising the slope to capture significant views.
- Utilising the slope to capture more natural light and sunlight.



Utilise sloping land to capture sunlight and views. Use it as an opportunity to develop basement parking.

Guideline 1 Make the most of sites on sloping land by taking advantage of views and access to sunlight.

Guideline 2

Aim for any changes to sloping land to appear as natural as possible by:

- Avoiding straight vertical or horizontal planes that would stand out when looking at the site.
- Balancing cuts into the land with fills, instead of using cuts and fills alone.
- Allowing space for planting and vegetation to soften the view of large retaining structures.



Guideline 2 Maintain a natural appearance when developing on sloped land, aim to utilise sloping land for capturing views and providing basement parking.

Guideline 3

Minimise the use of large retaining walls. If they are over 1m in height consider creating stepped retaining walls to reduce the visual impact and create areas for landscaping.



Guideline 3 Stepping and planting a retaining wall softens its appearance.

Guideline 4

On sloping sites, aim to maintain connections to the street and a street presence by:

- Locating the building entrance and vehicle access at the street edge.
- Minimising the front setback to achieve a close relationship with the street.
- Maintaining a visual connection by ensuring the commercial development overlooks the street.



Guideline 4 Street access for pedestrians and vehicles should be maintained on sloping sites.

Guideline 5

Aim to balance accessibility while minimising earthworks, retaining walls and ramps. Aim to provide level access to the building entrance, wherever possible, to allow anyone, regardless of physical limitations, to be able to easily enter the building (see building access).



Guideline 5 *Christchurch Civic Building.* This building used a mixture of ramps and shallow stairs to ensure the front entrance is as accessible as possible.
A ECOLOGY 8 HABITATS

Chapter Objectives

- 🕐 The design and layout of the development aims to protect and/or enhance Whangarei's natural environment.
- The design and layout of the development should allow access to natural features so people can enjoy them.



Distinctive Connected Attractive Inclusive Sustainable

The environment is what attracts many people to Whangarei and by retaining

and protecting it, it can become a major asset to any

New development comes with change and it is important to ensure that this change does not disrupt or destroy the positive natural characteristics

development.

commercial

of the site.

Guideline 1

Avoid building on areas of natural habitat. The design of the site and building location should aim to protect and enhance the natural environment.

Guideline 2

Avoid blocking natural features to the public, allowing physical access for the wider community, including visitors. Aim for commercial development to front onto ecological areas. Where this is not possible, ensure passive surveillance and outlook is maintained.

Guideline 3

Aim to protect and enhance watercourses existing mature trees or bush (particularly natives), distinctive contours, wetlands and dune systems, as features for the development.



Guideline 1 Buildings, roads and fences built onto or close to ecological areas can block public access.



Guideline 2 Avoid building on ecological areas. The building location should aim to celebrate and protect these.

<image>

Guideline 3 Cameron Street Mall, Whangarei. Maintaining mature trees is an effective way of integrating a new development.

Guideline 4

If the removal of mature trees or vegetation is unavoidable, the effects on amenity should be mitigated and/or enhanced with the introduction of new additional planting.



Guideline 4 If mature trees are removed from the site, make up for their loss by introducing additional planting or trees to the site elsewhere.

Guideline 5

Retain and improve the ecology and habitat of the site. This could be achieved by:

- Using riparian and other planting, including street trees.
- Treating contaminated land.
- Reducing stormwater as well as improving its quality.
- Pest and weed management.
- Using sustainable design techniques within the design of the building (See Building Design).



Guideline 5 Waiarohia Stream, Water Street Whangarei. Artist's impression showing riparian planting along the river's edge.

STORMWATER & HAZARDS

Chapter Objectives

- The development preserves natural landforms and features to help manage stormwater.
- The development manages stormwater and hazards by carefully locating structures and building platforms away from hazard-prone land.
- The development is designed to keep stormwater runoff to a minimum and aims to store and treat stormwater, on-site, as much as possible.



Commercial environments often have a high level of site coverage which creates impervious services and increases stormwater runoff. Stormwater management and low impact design should be considered early in the site planning process. It's best to work with, not against, natural systems, enhancing ecosystem and human health.

> Distinctive Connected Attractive Inclusive Sustainable

Guideline 1

Consider stormwater run-off in context with the whole area not just the development site. Aim to address as close to the source as possible by protecting existing soils and vegetation that contribute to stormwater management.



Guideline 1 Waitangi Park, Wellington. A man-made wetland to aid stormwater management.

Guideline 2

Avoid positioning residential development in areas which are highly susceptible to natural hazards.

Rules of Thumb

- Locate building platforms away from areas prone to natural hazards such as 100-year flood plains and overland water-flow paths.
- Consider creating higher building densities and smaller lots in other places on the development site.
- Use hazard-prone and other environmentally sensitive areas to add value to the development through outlook and amenity space, rather than fencing it off, which can lower the value of adjoining sections.
- Retain and/or restore natural streams and watercourses, which will minimise the risk of natural hazards such as flooding.

Rule of Thumb (above right)

Diagramme showing flood plains and flooding probabilities within those flood plains.

Rule of Thumb (below right)

Hazard prone areas could be used for public open spaces to add amenity to the area.





Guideline 3

Aim to minimise areas of hard surfacing (impervious surfaces) within the development to decrease stormwater runoff. Consider limiting the building footprint and/or using permeable materials.

Rules of Thumb

• To reduce hard impermeable surfaces, consider reducing the width and size of carparks, accessways and vehicle manoeuvring areas.



such as building footprints and carparking to decrease stormwater runoff.

Guideline 4

Consider incorporating methods for improving the quality of stormwater to achieve ecological benefits as well as public amenity benefits. These could include:

- Rain gardens
- Tree Pits
- Green roofs and green walls
- Swales
- Constructed wetlands
- Detention tanks.

These water-sensitive urban design options will reduce and slow down the flow of stormwater and clean it on-site.

Guideline 4 (above right)

Rain gardens and other water-sensitive urban design options will reduce and slow down the flow of stormwater and clean it on-site.

Guideline 4 (below right)

Jellicoe Street, Auckland. Rain gardens create an attractive street edge and provide an attractive outlook from buildings.





Guideline 5

When planning infrastructure for stormwater management, ensure life-cycle costs and ongoing maintenance is considered.

POSITION ON SITE

The position of a building and the spaces around it are vital to ensuring good quality design. The arrangement of the site should make the best use of the space in terms of outdoor space, public amenity, outlook, residential privacy, sun exposure and access. It should also respect neighbouring properties and their right to the same positive qualities.



BUILDING PLACEMENT

Chapter Objectives

- The building, associated spaces and services areas are positioned on site to maintain a strong connection to the street and adjoining public space, while protecting occupant's privacy, where necessary.
 - The development is designed so that the areas around the building have a clear function and are not
- considered as leftover space



Distinctive Connected Attractive Inclusive Sustainable

It is important to consider the placement of the building and the arrangement of the spaces around it. These spaces should have a clear function and be carefully considered. The position of the building, carparking, service areas, associated open spaces and connections is important in creating public activation and streetscape amenity, whilst also protecting privacy, where needed, and building function.

Guideline 1

Prioritise the placement and orientation of buildings, pedestrian access and associated outdoor space over carparking and service areas. These areas are still of importance and require legibility, but should be positioned in lower profile areas around the site.

Position the building first and the outdoor spaces second to ensure public amenity. The position of carparking and service areas should be prioritised last.



Guideline 1 Carparking and service areas are important to the building's function but their position should be within lower profile areas.

Guideline 2

Position commercial buildings to create a positive interaction with adjacent streets and public open spaces by:

- Positioning the building built up to the street boundary.
- Allowing occupants to overlook the street and public open spaces.

Rules of Thumb

 Setting back from the street boundary is okay where there are associated outdoor uses (i.e. outdoor dining). Consider maintaining a sense of enclosure by building part of the street frontage, or upper levels, up to the street boundary.

uideline 2 (above right)

Build up to the site boundary to create a continuous active frontage and a sense of definition and enclosure.

Rule of Thumb (below right)

This building is set back from the street edge to allow space for outdoor dining, but maintains a sense of enclosure.





Guideline 3

Position building fronts to face other building fronts across the street, while the back of the building faces the back of other buildings.

Guideline 4

Position on-site carparking behind, beside or below the development to ensure it does not impact on street amenity.



Guideline 4 Avoid placing carparking in between the building and the street where it can disrupt the building's active frontage.

Guideline 4 Plan the building and carparking position early on to ensure parking can be placed beside, behind or below the building.



Guideline 3 Building fronts should face other building fronts to protect public activity on the street.

Guideline 5

Associated public open spaces within the development site should be positioned to connect with the surrounding public spaces, streets and amenities, as well as be overlooked by neighbouring buildings.



Ensure pedestrian connections and public open spaces are overlooked by adjoining buildings

Guideline 5 Public open spaces within the development should have access to public streets and be overlooked by buildings.

Guideline 6

Position service areas away from the building frontage or entrances, preferably behind or beside the building where they are screened from public view but are still easily accessible to businesses and tenants.

Rules of Thumb

- Consider establishing shared service areas between multiple commercial tenancies and buildings as this will reduce the impact on pedestrians and building occupants.
- Service areas, such as rubbish bins/ storage should still be easily accessible for rubbish trucks and other service vehicles.

Guideline 6 (above right)

Private or communal outdoor spaces at ground level should be positioned beside or behind the building.

Guideline 6 (below right)

Butter Factory Lane, Whangarei. Consider creating shared service lanes between different buildings, and shielding rubbish storage from view behind the building.





Guideline 7

If the commercial development has any associated private outdoor spaces (either for employees, customers or on-site residents) ensure privacy is maintained by:

- Positioning them beside or behind the dwelling, rather than in front.
- Positioning them where they are screened from public view or where there are no direct sightlines.
- Positing them within the upper floors on balconies or terraces.



Raising the ground floor level and adding screening can break up views to private outdoor spaces.



Guideline 7 (above right)

Position private outdoor spaces where they can be screened from view.

Guideline 7 (below right)

Position private outdoor spaces on balconies within the upper levels.

BUILDING & SITE ACCESS

Chapter Objectives

- All access points to the site are located and designed to integrate effectively with the street or movement network beyond the site.
- Pedestrian access, entrances and approaches are designed to be safe, attractive and accessible for all regardless of age or ability.



Distinctive Connected Attractive Inclusive Sustainable

front of the building.

Building and site access, approaches and entranceways are an important part of a building as they mark a person's arrival. A focus should be given to the pedestrian and cycle access as it is what provides activity to the street and is often the first aspect of the building that people experience. Carpark and service entries should be made secondary to the main pedestrian entrance at the

Guideline ⁻

Support all transport modes (pedestrian, cycle and vehicle), and how they access the site as well as connect to the surrounding movement network.



Guideline 1 Consider accommodating all transport modes and supplying appropriate access and facilities for pedestrians, cyclists and drivers.

Guideline 2

Design pedestrian access to be direct, clear and safe for everyone. Position pedestrian access at the front of the building and to be accessible off the main street. In some circumstances, designers make the mistake of positioning entrances hidden from view of the street, leaving pedestrians disorientated.

Rules of Thumb

- Footpaths should be a minimum of 1200mm wide. However, a wider footpath can achieve a higher quality outcome, especially in commercial areas where there are higher levels of foot traffic.
- Footpaths and building approaches should be level, firm, slip resistant and a maximum slope of 1:20 with a cross fall of not more than 1:50.

Rule of Thumb (above right) Rathbone Street, Whangarei. An example of a wide footpath in Whangarei city centre.

Rule of Thumb (below right)

When designing footpaths, both on and around the development, consider the slope and cross fall.





Guideline 3

Position carparking beside or behind the building. If positioned beside, aim to set it back from the active frontage. The building should be more visible from the street.



Building Frontage

Guideline 3 Position carparking beside or behind the building, but ensure the building fronts the majority of the site.

Guideline 4

Aim to increase pedestrian safety and convenience by:

- Creating footpaths which are clear, safe and accessible for pedestrians.
- Minimising the width and number of vehicle access points on site.
- Ensuring clear sight lines at pedestrian and vehicle crossings.
- Using traffic calming devices such as landscaping and surface treatments where vehicle crossings are near or intersect pedestrian footpaths.
- Aiming to maintain a level thoroughfare for pedestrians at vehicle crossings.

Guideline 4 (above right)

High Street, Auckland. Planting is a good option to create traffic calming and separation between pedestrians and vehicles.

Guideline 4 (below right)

Maintain a level footpath and sightlines between pedestrians and vehicles at vehicle crossings.





Guideline 5

On sloping sites aim to balance accessibility while minimising earthworks, retaining and ramps. Aim to design the building to have level access from the street, into and around the development so all people, regardless of age or ability, can access the building.

Rules of Thumb

- Where there is a change in level, consider integrating an accessibility ramp into the landscaping. Avoid steep ramps as they are unsafe.
- Another option is wide shallow stairs which can accommodate a person and a piece of equipment (such as a walking frame or wheelchair).

Guideline 5 (above)

Old Municipal Building, Whangarei. Historic buildings often require sympathetic retrofitting to make them accessible.

Guideline 5 (below right)

An accessibility ramp which is well incorporated into the building entranceway and is given equal placement to the entrance stairwell.



OUTLOOK & NATURAL LIGHT

Chapter Objectives

- The building is oriented to take advantage of sunlight and daylight within certain spaces, and creates a balance between maximising winter sun and providing shade for summer sun.
- The building is oriented to take advantage of significant views and provide opportunities for passive surveillance.



Distinctive Connected Attractive Inclusive Sustainable

Guideline 1

Aim to position commercial offices so that habitable rooms within the development have access to daylight.

Habitable rooms could include office spaces, lunch rooms communal areas and foyers. Non-habitable rooms can include bathrooms, service areas, garages and stairwells. Other areas such as meeting rooms and corridors could also have natural light but should be given less priority.



Guideline 1 Diagramme showing how habitable rooms should be prioritised where access to daylight is available.

Guideline 2

Consider creating opportunities for natural light and outlook within large and tall buildings. This can be achieved with:

- Internal open spaces, or open spaces at the rear of the site.
- Setbacks from one or more side boundaries within the upper floors.
- Skylights, atria or light-wells (as well as external windows).
- Separation between buildings (neighbouring or ones on the same site) to allow views through gaps in the built form.
- Variation in roof height, which will provide variety and interest and also allow views through.



Guideline 2 Diagramme showing examples of how you can achieve light and outlook within particularly large or tall buildings.

Guideline 3

Ensure direct sunlight is focused within communal areas where everyone can benefit (i.e. shared spaces such as foyers, kitchens and lunch rooms. Where possible, provide sunny communal outdoor spaces.

Guideline 4

Consider the size, positioning and orientation of window openings to capture views. Larger windows, curtain walls and balconies capture key views as well as maximise opportunities for surveillance.

Guideline 5

Consider using shading devices such as eves, verandahs, louvres, screens and planting to optimise summer shading while enabling winter sun.



Guideline 3 Within commercial offices, the lunch room or break room is a good example of a communal area where everyone can benefit from direct sunlight.



Guideline 4 Office with a large corner window to capture views of the Wellington waterfront.



Guideline 5 Louvres help summer shading and optimise winter sun while also adding architectural interest.

FORM &

The building form and appearance are important when creating both an attractive and visually interesting commercial development. Considering the building form and appearance also helps the development work with, and fit seamlessly into its surroundings. The important aspects of building form and appearance are mass and height, façade articulation and the design of the building roofline.



4.1

The building mass and height is important to ensure the building is well integrated into its environment. While a new development should be consistent with the spatial and dimensional characteristics of its surroundings, it should avoid replicating the visual character and façade design. Good integration is not about imitation, but rather maintaining the scale, proportions and rhythm.

> Distinctive Connected Attractive Inclusive Sustainable

BUILDING MASS & HEIGHT

Chapter Objectives

- The building height is well integrated into the surrounding context and responds to the form and scale of the surrounding environment.
- Large developments are designed to reduce the bulk, height and scale and are well integrated into the surrounding environment.



Guideline 1

When determining the building mass, consider:

- The site size, shape and topography.
- The mass, character and setback of existing and future neighbouring buildings.
- Orienting the building mass towards the street or public space to create a sense of entry and enclosure.

Reference the height, width and depth of adjacent buildings to ensure any new development is not significantly different in scale.



Guideline 1 Before designing the building, consider the height, width, depth and scale of neighbouring buildings.

Guideline 2

When determining the building height, consider:

- The maximum height as permitted in the district plan.
- The building proportions (i.e. the width and depth).
- The height of existing neighbouring buildings to maintain consistent proportions and rooflines.
- Significant views to the street and/or the surrounding environment.
- Overshadowing and effects on sun access and privacy to adjacent public space and neighbouring properties.
- The site conditions (i.e. wind and sunlight).

Rules of Thumb

- Consider introducing a floor-to-ceiling height of 3.5m to ground floor spaces to allow the building to be adapted for different uses.
- For other habitable spaces within the upper floors of the development, consider a floor-to-ceiling height of 2.7m, minimum, to allow more natural light and ventilation.



Reference the heights of neighbouring buildings through facade design or modulation.

Guideline 2 Consider the heights of adjacent buildings and their floor levels, to maintain similar proportions.



Rule of Thumb Consider floor heights to allow spaces to be adaptable so their use can change overtime.

Guideline 3

Consider reducing the bulk, size and height of larger buildings by:

- Limiting continuous ridgelines and long blank walls (especially where facing public areas).
- Breaking buildings up into multiple smaller vertical components.
- Referencing the height, scale and design features of surrounding buildings.
- Creating a transition in height.
- Breaking the building up horizontally (base, middle and top).
- Setting the upper level back from the street.
- Providing modulation and human scale through detailing such as balconies, windows and verandahs.
- Introducing planting to soften the form of the building.
- Creating variation in materials, colour and texture.







Create a transition in height

Break wide buildings up vertically to appear in scale with neighbouring buildings.



Guideline 3 (left)

Buildings can be broken down using modulation, setbacks and human scale to create visual interest and express individual tenancies.

Guideline 3 (above)

Buildings that are out of scale can be broken down vertically and through a transition in height.

Guideline 4

Where large building footprints are unavoidable, consider:

- Wrapping multi-storey buildings with smaller grain buildings.
- Breaking up the exterior façade using texture, colour, material changes, vertical pillars and other façade treatments (see 4.2 façade design).

Guideline 5

Corner sites, gateways and areas alongside open space present the best opportunity as locations for taller buildings to create a landmark and aid legibility.

Guideline 6

Consider using massing to emphasise certain parts of the building such as entranceways and corners.



Where significantly large buildings are unavoidable, disguise their scale by wrapping them in smaller buildings.

Guideline 4 Large buildings such as big-box retail and supermarkets can be wrapped in smaller buildings to break up the scale.



Taller larger buildings are most appropriate for corners to emphasise intersections and create a landmark.

Guideline 5 Corner sites are appropriate for taller building development.



Guideline 6 Use the mass of the building to highlight key features such as the building entranceway.

52 FAÇADE DESIGN

Chapter Objectives

- The façade design creates engagement between public and private and has an appropriate human scale which positively contributes to the street environment and pedestrian amenity.
- The building is designed to express different units and businesses within a development.



64

Distinctive Connected Attractive Inclusive Sustainable

Human scale is the scale that

feels comfortable to us as

we naturally measure things

against ourselves. While a

building's size, mass and height are influential when it comes to integrating positively into the neighbourhood context; the human scale and articulation of the façade design influences how the building fits into the street environment and how people experience and actively

engage with a building.

Guideline 1

Design façades with articulation, rhythm and detail to engage visually with pedestrians passing by and create more distinctive and legible environments.





Guideline 2

The façade design should respond to the positive characteristics of its context. Within neighbouring buildings, consider:

- The roof shape and overhang, verandahs, balconies and porches.
- Windows and doors.
- Façade modulation.
- Façade materials.



Guideline 2 Bank Street, Whangarei. These buildings have façades which maintain the same scale, but still provide individuality and visual interest.

Guideline 1 (above right)

Façades should be visually interesting and create human scale.

Guideline 1 (below right)

Functional aspects of the façade, such as privacy screens, add interest to the façade design.

Guideline 3

The building's façade should

- Avoid being overly repetitive.
- Create vertical and horizontal modulation, projections and voids (openings) to break up the scale and bulk of the façade.
- Create depth by projecting and recessing elements.
- Have well-defined building entrances which add visual interest and engage with the street.
- Have well-proportioned windows and openings that relate to the shapes and forms of the building.
- Use colour and material changes to highlight details and building forms.
- At ground level, have active uses visible from the exterior or that spill out into the public street (see active frontage).



Massing breaks up a facade giving it human scale as well as emphasising key areas such as entrances.





Guideline 3 (above)

Massing can add visual interest, depth and highlight key parts of the building.

Guideline 3 (above right)

Avoid too much repetition, which leads to a building losing its visual interest and becoming monotonous.

Guideline 3 (below right)

ASB building, Whangarei. This building façade provides visual interest and depth.

Guideline 4

Design all parts of the building together to create a clear relationship and character. This includes the walls, roof, windows, entranceways, verandahs and patios.



Guideline 4 University of Auckland Science Centre. The façade design has a clear relationship created with the shapes, colours and materials.

Guideline 5

Provide articulation to the building corner by:

- Locating prominent entranceways at the apex of the corner.
- Using recesses or projections in the building form to express the corner.
- Adding architectural features which wrap around the building at the corner, such as balconies, windows or continuous rooflines.
- Setting the corner back to provide areas of public amenity space.



Guideline 5 The building design uses colour, materiality and massing to highlight the building corner and the main entrance.

Guideline 6

Aim to express tenancies within a building as separate entities to provide a sense of individuality. Differentiate units through:

- Colour and material changes.
- Size and scale.
- Changes in roofline.
- Variation in the alignment and orientation of buildings and units.
- Architectural detailing (i.e. windows, entranceways and verandahs).



Guideline 6 Buildings should use materials, architectural detailing, modulation and orientation to differentiate between different tenancies.

Guideline 7

Avoid designing façades which are flat or monotonous, particularly on edges where pedestrians are present.

Rules of Thumb

- Buildings with a strong horizontal emphasis tend to disrupt the visual rhythm of streets while façades with vertical elements break up views and make objects appear closer, creating visual interest.
- The maximum length of a building façade is 15m before a vertical recess of at least two metres or separation of buildings is needed.



- Objects appear further away making it seem longer to get from A to B.
- No visual difference making people less inclined to walk and explore.





- Objects appear closer and trip is broken up into multiple trips (A to B to C to D).
- Visual interest making people more inclined to walk and explore.

Rule of thumb (right)

Breaking the building up vertically along its façade adds visual interest and reduces the bulk of the building.

Guideline 7 (above)

Blank, monotonous walls should be avoided as they create unattractive and unsafe environments.
Guideline 8

Consider integrating building services, such as drainage pipes, grilles, screens, louvres and carpark entry doors into the façade design.





Guideline 9

Materials should be well integrated into the façade design. Consider:

- The local character and context.
- Design narrative.
- Using robust and low maintenance materials.
- Climate and environmental conditions.
- Buildability.
- Seismic Resilience.



Guideline 9 UNSW Bioscience Building, Sydney. The terracotta tiles were key to the design narrative and reminiscent of the natural environment.

Guideline 8 (above right)

The colourful louvre blades on this building façade give the building texture and are visually striking.

Guideline 8 (below right)

Lichfield Street Carpark, Christchurch. The ventilation grilles of this building have been well integrated into the façade and designed to be a feature and add interest.

BUILDING ROOFLINE

Chapter Objectives

• The design of the building roofline has appropriate articulation and positively contributes to the street environment, pedestrian amenity and the overall appearance of the building.



The building roofline is often an afterthought, but is highly visible both from taller adjacent buildings across open space and from the street below. It should be designed to complement the building exterior. Changes in the ridgeline, direction, height and varying the parapets, form and pitch can provide variety and create an interesting roofline.

Guideline 1

Consider existing rooflines and pitches of neighbouring buildings and consider continuing the existing pattern.



Guideline 1 The Supreme Court, Wellington. The modern extension of the building appears different but maintains the same roof and floor heights.

Guideline 2

Consider designing variation in the roof form to create visual interest. This can be achieved through changes in height, orientation and roof shape.

Rules of Thumb

• Use the roof design to emphasise different parts of the building, such as the main entrance, internal spaces and orientation towards sun and views.





Guideline 2 (above right)

Whare Waka, Wellington. This building has a low elevation but a large roof, which is a key feature of the architecture.

Rule of Thumb (below right)

This building has a change in roofline height to emphasise the building corner as well as the main entranceway.

Guideline 3

Avoid creating a continuous ridgeline or excessively high and steeply sloping rooves. Break the ridgeline down into smaller elements using changes in height, shape and setbacks.



Guideline 3 Break up the roof form and ridgeline with variation by creating smaller elements.

Guideline 4

Use simple roof forms which are cheaper to build and have less chance of future maintenance issues.



Guideline 4 Simple roof forms. To create variation a combination of these roof forms could be used.

Guideline 5

Rooftop building services, such as plants and mechanical and electrical equipment, should be set back so they are not viewed from the street and/or concealed behind a parapet or extended wall.



Guideline 5 Conceal plant equipment by setting them back from the edge of the building or placing them behind parapets.

Guideline 6

Consider incorporating green rooves or roof gardens into the building development to provide outlook and amenity for residents and reduce stormwater runoff.



Guideline 6 Incorporate green rooves or walls to add visual interest and articulation to the building as well as aid stormwater run off.

RESPONSE TO THE STREET

How a development responds to the street and adjacent public space is important when creating an attractive and safe commercial environment. Buildings should be designed to create active frontages, engage with the street with well designed building verandahs and have clear building signage. It is also important to balance this with protecting privacy within the building where needed, while still providing surveillance to the surroundings.



For a building to contribute positively to its surroundings it must have an active frontage. A building's façade can be designed in such a way that it 'reaches out' to the public realm, providing physical as well as visual opportunities for interaction. Large and frequent windows and doorways with views into the building provide interest to those passing by. Views out provide eyes onto the street contributing to safety. Buildings that do not open out to the street and turn their back on the public realm achieve the opposite.

5.1

Distinctive Connected Attractive Inclusive Sustainable

ACTIVE FRONTAGE

Chapter Objectives

- The design of the building edge positively contributes to the built environment and supports an active and attractive street edge.
- The design of the building begins to mitigate the adverse effects of blank walls.
- The design of the building has a distinctive and visible entranceway which is easily accessible to all, regardless of age or ability.



Guideline 1

To design the frontage to create a building which positively engages with the street:

- Orientate the building towards the street.
- Design the building to reinforce the street edge and create a continuous building line.
- Accommodating 'active' uses such as retail, cafés and restaurants at ground level.
- Designing the frontage with large windows at ground level, which allow views in and out of buildings.
- Designing the façade to create visual interest and support the pedestrian experience.

Rules of Thumb

- Allow building setbacks at the front when they allow for active uses to extend out, such as outdoor dining. However, it is important to ensure that a clear and well defined pedestrian path is maintained along the street.
- Commercial development within main commercial centres should devote 70-80% of the façade along the main street

to clear glazing, and 60-70% on other street frontages. Upper floors should also have glazing, but normally less than the ground floor.

• Other commercial developments should have at least 50% clear glazing if on the main street and 25% on other street frontages.



Guideline 1 (above)

Buildings should have a continuous building line, unless set back to accommodate an active use.

Guideline 1 (above right)

Lambton Quay, Wellington. Buildings should face the street and engage with passing pedestrians.

Guideline 1 (below right)

Holey Moley, Auckland. Having large windows and allowing activity to spill out of the building, helps create active frontages.





Guideline 2

A well designed entranceway is a key part of an active frontage. When designing the entrance to the building, ensure it is:

- Located at the front of the building, facing the street.
- Clearly visible and easily identifiable.
- Well articulated and prominent within the design of the building. This can be achieved through façade articulation (see façade articulation).
- Inclusive of shelter from the wind and rain, where possible.
- Easily accessible for all.
- Well lit to ensure safety.
- Connected to an internal space such as shop front, lobby or reception area.

Rules of Thumb

• Where a direct entrance onto the street is not possible, it needs to be directly visible, easily accessible and as close to the street as practically possible, ideally within 5m of the street boundary.



Guideline 2 The architecture of this building creates a clear archway to highlight the building entrance.



Rule of Thumb Entrances which are away from the main building frontage should be highlighted and no more than 5m from the street boundary.

Guideline 3

When designing for active frontages, avoid:

- Reflective or heavily tinted glass, or blocking views with internal blinds.
- Window displays, advertising banners and shelving which disrupt the view into and out of the building
- Solid materials with minimal glazing which compromise the active street.



Guideline 3 Tinted windows can disrupt active frontages as they disrupt views which create a presence of people and to street vibrancy.

Guideline 4

Where large windows at ground level are not appropriate or are unavoidable, such as the rear of buildings and service lanes, consider mitigating effects by:

- Using tall plantings to soften and disguise the blank frontage.
- Creating façade articulation, change in material, colour and modulation can be used to break up the elevation of a blank wall and provide visual interest (see Façade articulation).
- Livening up blank walls with murals or green walls.

<image>



• Where privacy is a concern set the activity back from the windows or add external screening which can create visual interest, and provides additional internal shading.

Rule of thumb (above right)

Warren & Mahoney, Christchurch Studio. This ground floor office space is set back from the street façade and used as critique and gallery spaces.

Guideline 4 (below right)

HONGI, Millo, Cameron Street Whangarei. A mural can be used to add interest to a visible blank wall.



Guideline 5

Consider the frontage design of corner sites:

- Maintain active frontages on both adjacent streets.
- Windows could be wrapped around the building façade at ground level.
- Position the building entrance directly on the corner to highlight its location.



Guideline 6

Large format retail should aim to provide active frontages and engage visually with pedestrians on the street. Consider:

- 'Wrapping' with smaller development units.
- Locating behind established smaller grain development.
- Placing windows and entrances along the building elevations which face the street.



Large-format retail can be disguised by wrapping it in smaller buildings.

Guideline 6 (above)

Wrap large buildings with smaller buildings.

Guideline 6 (above right)

Large format retail often contains blank walls and is a very car-centric environment.

Guideline 6 (below right)

Queens Plaza, Brisbane is a shopping mall which is framed by smaller retail stores to maintain an active street frontage.



Guideline 7

Ensure that active frontages onto the street take precedence over those facing directly onto any associated carparking.

> Facing associated carparking rather than the street can lead to blank walls and inactive street frontages.



Guideline 7 Avoid facing associated carparking rather than the street.

Guideline 8

Locate services away from the active frontage or entrances. Provide designated areas that are separate from public areas but easily accessible for businesses.



5.2 PUBLIC VS. PRIVATE

Chapter Objectives

• The design of the building edge provides the appropriate amount of privacy for occupants while preserving activity within the public realm.



While active frontages encourage interaction, their position at the front of the building also protects private uses at the back of the building. When a private activity is positioned along a public frontage, the interface can be tricky as it needs to enable interaction as well as protect an occupant's privacy. This can have a significant impact on both the activity and surveillance of the street as well as the internal amenity.

Guideline 1

Enhance safety and perceptions of safety by allowing passive surveillance. This is achieved when building occupants overlook streets and other public areas.

Rules of Thumb

• Passive surveillance is the rule of 'see and be seen.' People are present and can see what is going on, making them safer and feel safe (see Crime Prevention and Public Safety).



Guideline 1 Orienting buildings towards the street or public space will allow occupants to provide surveillance to these areas.

Guideline 2

Create a clear definition between public and private spaces, including service areas, private outdoor spaces or residential units. This can be achieved by:

- Positioning private uses beside, behind, above or setting back from the public street, active frontage or public space.
- Managing access by developing private entranceways which are separate to commercial entranceways.
- Having clear boundaries between private and public spaces.

Position private uses beside, behind or above the main frontage of the building to protect privacy and activity.





83

Guideline 2 (above right)

Position private uses where they can gain the most privacy away from active frontages and public spaces.

Guideline 2 (below right)

Mixed Use Infill, Portland, Oregon. This mixed use development has separate entrances for retail spaces and offices as well as residential units above. This creates security, but allows for 24/7 activity.

Guideline 3

Protect the privacy and security within the development while allowing passive surveillance between the building and street. This can be achieved by:

- Creating safe entranceways which provide clear sightlines between the building and the street.
- Adding a fence, wall, hedge or planting along private boundaries, which is visually permeable to give passing pedestrians a sense of privacy.
- Minimising direct sightlines by lifting the ground floor level.
- Carefully designing the height of boundary walls, balustrades and window sills to control views into a property.
- Designing external or internal screening or tinted glass.
- Creating buffer zones to ensure privacy between buildings and the street.

Guideline 3 (above right)

This building has a private entranceway which is set back from the street, but maintains direct sight-lines ensuring safety and surveillance.

Guideline 3 (below right)

Raising the floor level or window sill height can maintain views out while restricting views in.



Raising the ground floor level and sill height can allow views out of the building but limit views in.

Guideline 4

Increase privacy between buildings by:

- Offsetting windows so they don't directly face each other.
- Staggering the building line or setting back sections of the building (i.e. upper floors).
- Designing louvres, screens, or fins on windows or balconies.
- Incorporating landscaping as a screen between spaces.



Guideline 4 Consider ways of increasing privacy between buildings.

BUILDING VERANDAH

Chapter Objectives

• The building provides a verandah that is functional, attractive, easy to maintain and contributes positively to the street environment.



Verandahs provide shelter from the elements for pedestrians as well as sun protection for the building's internal spaces and displays. Well-designed verandahs contribute to the local urban character, add architectural articulation to the building frontage as well as providing continuity along the street edge, contributing to the active frontage and reinforcing the human scale.

5.3

Guideline 1

Aim to create a verandah that extends along the entire street frontage of active pedestrian streets.



Guideline 1 Cameron Street Mall, Whangarei, maintains a continuous verandah along its edges to provide shelter for pedestrians.

Guideline 2

Carefully consider the height and depth of verandahs.

- Aim to connect to adjoining verandahs to create a continuous building line as well as continuous shelter for pedestrians.
- Ensure any new verandahs are designed to meet the minimum height of 3m. This will allow lighting and signage to be introduced below and will ensure they are kept out of reach from potential vandalism.
- Ensure no new verandahs are too high (maximum 4m) to provide adequate weather protection.
- Design verandahs to be kept back from the road kerb to ensure large vehicles do not cause damage.
- Verandahs should be a minimum of 2.5m wide except where they encroach on the 0.6m kerb clearance.

Guideline 2 (above right)

Cameron Street Mall, Whangarei. Aim to align verandah heights and widths to create a continuous building line.

Guideline 2 (below right)

Consider the height, depth and appropriate setback and width of the verandahs.





Guideline 3

Aim to design the verandah to respond to the building form and be well integrated into the building façade.



Guideline 3 Albert Lane, Brisbane. This building's verandah is designed to draw people into the space as well as integrate with the façade.

Guideline 4

Integrate signage into the design of the verandah. Limit signage placement to the edge or underside of a street verandah to avoid visual clutter (see signage).



Guideline 4 *Cuba Street, Wellington.* This building has signage beneath and on the edge of the verandah, to protect the appearance of the façade above.

Guideline 5

Consider the incorporation of lighting into the verandah. This may include public space lighting to the footpath below as well as amenity lighting of the building façades.



Guideline 5 Lambton Quay, Wellington. Provide lighting on the verandah and to the footpath below, as well as up lighting, to highlight the building façade.

Guideline 6

Consider introducing glass to the verandah to allow natural light to the footpath below.



Consider continued maintenance of the verandah after construction, and that any associated glass within the design is able to be well maintained and cleaned.



Guideline 6 *Queen Street Mall, Brisbane.* Introduce glass to the verandah to allow natural light to the footpath.

BUILDING SIGNAGE

Chapter Objectives

- The design and placement of commercial signage is functional, supports amenity values and does not hinder pedestrian activity.
- Signage provides wayfinding and orientation while also contributing to the character of the development.



Distinctive Connected Attractive Inclusive Sustainable

when

poorly

appearance,

5.4

Guideline 1

Consider the surrounding area and ensure signage does not visually disrupt, obscure or dominate the character of the surrounds. Characteristics to consider could include:

- Key view shafts and prominent skylines.
- Landmark and heritage buildings.
- The architectural features on the building, including windows, doors parapets and other decorative details.
- Existing signage on the building or within the surrounds.



Guideline 1 Meridian Mall, Dunedin. Consider existing signage on the building and the character and context of the building.

Guideline 2

Consider where the signs will be viewed from and who by.

- Design signs to be visually interesting and effectively convey information.
- Design signs of a scale and position to ensure appropriate readability.

For example, larger signs with less information are generally more suitable for vehicleoriented areas; illuminated signs are generally appropriate within entertainment areas; smaller signage of a human scale enhances 'pedestrian experience' and is most desirable in pedestrian-oriented spaces.

Signage that is too small with too much detail can be difficult to read and can create visual clutter.

above the verandah are designed to be viewed from vehicles driving past. They are large, clear and simple in

The Quest, Bank Street, Whangarei. The signs positioned

Guideline 2 (above right)

Guideline 2 (below right)

their design.



COMMERCIAL URBAN DESIGN GUIDELINES - 5. Response to the Street

Guideline 3

Signs should be designed in scale with the building to which they are attached. Consider the sign dimensions in relation to important dimensions of the building and its façade elements. Such dimensions include:

- The height/width of the building façade.
- Windows size and proportions.
- Spacing between columns (structural bays).
- Floor-to-floor height.
- Parapets.
- Verandahs.

Rules of Thumb

• Signage should not occupy more than 25% of any building elevation.

Guideline 3 (above right)

Consider building dimensions when placing signage. Large billboards are only appropriate on large buildings.

Guideline 3 (below right)

Diagramme showing possible locations for signage based on features and dimensions.





Guideline 4

Avoid designing signs that extend outside the building façade or project above the parapet or building roofline.

Rules of Thumb

• Signs should be confined to the building frontage, below or on the edge of the verandah, to avoid visual clutter.



Guideline 4 Signage and billboards should not project above or outside the building façade.

Guideline 5

Signs on the site should be easy to read and tactfully placed. Too many signs can result in visual clutter, confusion and obstructed visibility. Avoid creating visual clutter by:

- Considering signage placement as early as possible.
- Minimising the total number of individual signs on a single building or site.
- Minimising the number of different designs, shapes and sizes of signs on a single building or site. Avoid the creation of visual clutter and numerous signs of contrasting sizes styles, colours and graphics.
- Consider the scale, location and positioning of new signs relative to existing signs.
- Seek to integrate signage for buildings with more than one occupancy.
- Signs should not be hung from, placed on or supported by other signs.

Guideline 5 (above right)

To many signs viewed from one location can be an eyesore and can create confusion.

Guideline 5 (below right)

Meridian Mall, Dunedin. Consider collective signs at building/site entrances, or adopting a uniform style for individual signs.



Guideline 6

Aim to keep free-standing signs to a minimum as they clutter the streetscape, create traffic hazards and can obstruct pedestrian movements and wheelchair access.



Guideline 6 Free-standing signs should be integrated into the streetscape design and ensure pedestrian movement.

Guideline 7

Consider effects on road safety for signs which are located around intersections and are visible from roads with high speed limits and traffic volumes.



Guideline 7 Be considerate of traffic movements and safety when positioning and designing signage.

Guideline 8

Illuminated signs can add interest and ambience to a commercial area. If not designed or located appropriately they have the potential to dominate their surroundings and can cause issues for incompatible uses (such as residential apartments). Consider:

- The character, amenity and uses in the areas and if these signs are compatible.
- The type of lighting. Signs with down lights or internal illumination create less glare, are more visible from the surrounding area and cause less unnecessary light pollution than up lights.
- The careful placement of lights and associated wiring, and how it appears during the day.

Guideline 8 (above right)

Courtney Place, Wellington. Illuminated signs can create character and ambience in areas where nightlife is prominent.

Guideline 8 (below right)

Down lights can create less light pollution and glare.





Guideline 9

Consider the design and location of flashing, animated or rotating signs and billboards

- Limit their locations to night-time entertainment areas where they can add to urban vitality and interest.
- Avoid positioning them where they can cause a distraction to motorists.
- Avoid positioning them and/or displaying advertisements which negatively affect character areas and can be a source of annoyance for residential areas.



Guideline 9 Flashing and animated signs should be placed in entertainment areas where they can add interest.

Guideline 10

Consider the materials used, and the ongoing maintenance requirements for signage.

SPACES

Outdoor spaces are an important aspect of commercial environments. Not only do they provide landscaping, access, activity and amenity, they are also often used for services and utilities. These spaces need to be carefully managed and arranged to ensure they do not affect the quality of the outdoor spaces and development. They also need to be designed to be safe and feel safe for all those who use the space.



6.1

Public space is a significant part of any commercial centre whether it be streets, informal meeting places or areas for outdoor dining. Welldesigned public space can attract people and facilitate socialisation. movement, economic exchange, and other activities. The commercial environment will encourage engagement, opportunities for gathering and ensure a healthy, liveable and sustainable urban environment.

> Distinctive Connected Attractive Inclusive Sustainable

PUBLIC SPACE & STREET DESIGN

Chapter Objectives

- Streets and public spaces are designed to be well-connected to surrounding movement networks and key amenities, accommodate a mix of transport modes and encourage walking and cycling.
- Footpaths on streets are well designed, accessible and functional.
- Streets and public spaces are designed to be safe and well overlooked by neighbouring buildings and public spaces.



Guideline 1

Do not consider public space or open space as leftover land. The location and design should be informed by the context site analysis and the needs of the community.



Guideline 1 *Town Basin, Whangarei,* allows people to enjoy the sunshine and the water's edge.

Guideline 2

Any associated public spaces within the development should be designed to be:

- Easily accessible for all, regardless of age or ability.
- Providing of adequate lighting and well overlooked.
- Attractive and providing a pleasant outlook for your development as well as neighbouring properties.
- Functional and flexible, providing a mix of furniture and spaces.
- Easy to maintain.
- Used year-round, including during the day, night and different seasons of the year, and oriented away from prevailing winds.
- Oriented towards the north, east or west to make use of daylight and sunlight throughout the year.

Guideline 2 (above right)

Kings Cross Square, London. A mixture of ambient and central lighting, as well as having the public space overlooked by occupied buildings will make people safe and feel safe.

Guideline 2 (above right)

New Town Basin Park, Whangarei. Artist impression showing a variety of spaces to attract different people within the community.





Guideline 3

Ensure streetscapes and through routes within public spaces are:

- Well connected to existing movement networks, footpaths and significant amenities.
- Of an appropriate width for pedestrian foot traffic.
- Accessible to all users, regardless of age or ability.
- Kept clear of permanent or temporary structures or obstructions.
- Of an appropriate gradient, stable, slip resistant and with no sudden changes in height.
- Positioned next to active frontages or amenities to encourage opportunities for activity and passive surveillance.

Rules of Thumb

- Where there is insufficient room within the street environment, decrease the width of the roadway before decreasing the footpath.
- The gradient and width of any footpath should be appropriate for wheelchair access.







If the road carriageway needs widening look to accommodate it within the roadway (i.e. removal of on-street parking) rather then reducing the footpath width.



Guideline 3 (above)

Vulcan Lane, Auckland. This street is overlooked by a mixture of businesses making it safe and active throughout the day.

Guideline 3 (above right)

Ensure paths are well connected to their surroundings and follow key pedestrian desire lines.

Guideline 3 (below right)

Decrease the road width or accommodate within the road carriageway before decreasing the footpath.

Guideline 4

Consider the design and placement of street furniture and infrastructure to ensure it is appropriate for the environment and does not act as an obstruction to through-traffic, create trip hazards, or obscure visibility between pedestrians and vehicles.

Rules of Thumb

layouts (furniture Street zone etc.). Create a buffer zone between pedestrians, moving vehicles and other transit modes by the use of landscaping and street furniture. Examples include street trees, benches, bicycle racks, bus shelters and pedestrian lighting.

Guideline 4 (above right)

This street has positioned planting, street trees and cycle racks where they will not obstruct pedestrians.

Guideline 4 (below right)

Furniture zones on footpaths can create amenity, social spaces and a buffer between pedestrians and moving vehicles



buffer between pedestrians and moving vehicles

Guideline 5

Consider introducing bicycle parking to public spaces and streets. Ensure they are positioned within active public spaces where passive surveillance is present (See Accommodating vehicles - Bicycle Parking).



cycling.

6.2 CRIME PREVENTION & PUBLIC SAFETY

Chapter Objectives

- Streets and public spaces are designed to be well-connected to surrounding movement networks and key amenities, accommodate a mix of transport modes and encourage walking and cycling.
- Footpaths on streets are well designed, accessible and functional.
- Streets and public spaces are designed to be safe and well overlooked by neighbouring buildings and public spaces.



102

Commercial areas that foster discourage activity can and anti-social crime behaviour. Creating plenty of opportunities for visibility, lighting, activation and clear definition of ownership will help prevent crime and the fear of crime. Other safety options, such as surveillance cameras. can also be employed, but should be considered 'as well as' rather than 'in lieu of' best practice Crime Prevention Through Environmental Design (CPTED).

Guideline 1

Consider Crime Prevention Through Environmental Design (CPTED) principles when trying to maximise safety and perception of safety.

Rules of Thumb

- CPTED reduces the fear of crime, the occurrence of crime and anti-social behaviour. The four key principles are:
 - Surveillance 'see and be seen' people are present and can see what is going on.
 - Access management methods are used to attract people to some places and restrict them from others.
 - Territorial reinforcement clear boundaries encourage community 'ownership' of the space.
 - Quality environments good quality, well maintained, well lit, places attract people and support surveillance.

Guideline 1 (above right)

Woolwich Squares, London, encourages diverse activity and is well overlooked.

Guideline 1 (below right)

Laneway, James Street, Whangarei. High quality, well maintained environments attract people.



Guideline 2

Attract more people to a site by introducing a mix of activities which appeal to a diverse group of people of different demographics.

Rules of Thumb

• A variety of uses, spaces and facilities will attract people at different times of day and throughout the year (i.e. residential buildings, offices, retail, playgrounds and hospitality).



COMMERCIAL URBAN DESIGN GUIDELINES - 6. Outdoor Spaces

Guideline 3

Consider designing public spaces and streets with opportunities for passive surveillance:

- Locate public spaces along key pedestrian routes, and to be adjoined by streets.
- Activate public spaces with activities such as outdoor dining, walkways and active frontages on adjoining businesses.
- Public facilities such as seating, drinking fountains, public toilets and playgrounds will encourage people to linger within public spaces and social interaction, activating them for longer periods of time.
- Consider the placement of public spaces to ensure they are overlooked by adjacent buildings.
- Avoid locating public spaces where there is limited visibility, such as behind buildings or on sloping sites.
- Avoid blocking views and sightlines to public spaces with walls, structures, tall impermeable fencing and planting.

Guideline 3 (above left)

Creating areas for outdoor dining as well as connecting to main pedestrian routes can create vibrancy and surveillance.

Guideline 3 (below)

Public spaces should be positioned where they are well overlooked by buildings.



Guideline 4

Avoid places of concealment such as hidden recesses in buildings or hiding places behind landscaping.

Rules of Thumb

• Locate entranceways, street furniture and ATMs in clearly visible and well-lit places.



Guideline 4 Areas that are enclosed or concealed from view should be avoided, as they can be unsafe or feel unsafe.
Guideline 5

Good design will provide opportunities for passive surveillance, which means fewer requirements for active methods of surveillance such as CCTV (Closed-Circuit Television) or security guards.

Rules of Thumb

- Where passive surveillance cannot be provided, is not feasible or reliable, consider more formal methods. It is important to note that:
 - CCTV cameras are primarily a crime detection tool rather than a prevention tool.
 - CCTV can deter some offenders, so signage indicating the presence of CCTV can help.
 - If CCTV cameras are monitored live, it can help the responsible authority to react more effectively in resolving an incident. If not monitored live, its footage might be useful in identifying the offender after the incident happens.



Guideline 5 *Laneway, Whangarei.* Nothing makes people feel safer then the presence of other people.

Guideline 6

Clearly differentiate between public and private spaces by defining property lines through low fencing, planting, landscaping, paving and entranceway treatments.



Guideline 6 Where there is a mixture of public and private outdoor spaces, use fencing and planting to create separation and define property lines.

Guideline 7

Quality lighting supports activity and visibility. When designing lighting, consider:

- Lighting public spaces, footpaths, public facilities, carparks and building entrances to encourage activity and ensure surveillance at night.
- Prioritising areas that have the most number of users, connect to main streets, and have the best opportunities to create passive surveillance.
- Lighting details such as colour, lux levels, and position and height of lighting.

Rules of Thumb

- Increased lighting has a positive impact on the public's perceptions of safety, however, lighting by itself does not necessarily improve safety. In areas with low activity or limited surveillance, providing lighting may be counterproductive to signalling a safe environment.
- Provide adequate lighting in public spaces so people can identify the presence of another person from at least 15m away.



Guideline 7 Good quality lighting is key to making spaces safe and feel safe at night.

Guideline 8

Access to public spaces should be from the street. If not, then they should be in areas overlooked by commercial buildings. Access ways into the site should be wide (see Guideline 12).



Access to open space should be off the street

Guideline 8 Aim to have access to open space off the street, otherwise ensure access is well overlooked.

Guideline 9

Develop a sense of place and local pride by:

- Considering the local character, community and culture within the design.
- Supporting positive social interaction through amenities, seating and lighting.
- Physically and visually connect to the surrounding area, buildings and amenities.
- Avoiding neglect by maintaining spaces, replacing or repairing associated infrastructure quickly. Allowing vandalism or graffiti to remain shows there is little resistance to this behaviour.
- Introducing art, mural and sculpture to public spaces.

Creating spaces to stop, interact or people watch creates a sense of place as it allows people to loiter and enjoy the

Bascule Park, Whangarei. Connect both visually and physically to surrounding amenities and attractions.

Guideline 9 (above right)

Guideline 9 (below right)

space.



Guideline 10

Design quality environments with appropriate management and maintenance, to ensure they maintain the same quality and continue to be well cared for and discourage neglect, vandalism and anti-social behaviour.

Rules of Thumb

 Whenconsideringongoingmaintenance and management, think about the materials. Consider maintenance specifications, endurance and strength of materials, their availability, and ongoing repair and replacement costs.

Guideline 11

Avoid establishing tall solid fences or blank walls adjacent to or around public spaces as they can be targets for graffiti.



Guideline 11 Tall fences adjacent to public spaces disrupt surveillance and encourage graffiti.

Guideline 12

Ensure pedestrian and cycle-only links (including underpasses and overpasses) are as short and as straight as possible and at least 6 metres wide. Aim to have them overlooked by adjacent properties as much as possible.

Guideline 12 (above right)

Kamo Shared Path, Whangarei. Underpasses should be as short and as straight as possible to maintain sightlines.

Guideline 12 (below)

Pedestrian-only paths should be a minimum 6m wide, as short and straight as possible, and overlooked by activities and buildings.



Having a turn or corner in the path blocks views and can disrupt passive surveillance.





Tall fencing should not visually obstruct the entire path.

6.3 LANDSCAPE DESIGN

Chapter Objectives

- The landscaping is designed to a high quality to provide opportunities for outdoor activity, improve privacy, outlook and amenity for building occupiers and the public.
- The landscaping contributes to the local streetscape character and the amenity of the wider area.
- The landscape design improves the appearance and functionality of the streetscape and public domain, and softens the adverse effects of blank wall and carparking.



110

building design. Distinctive Connected Attractive Inclusive

Guideline 1

Design landscaping that contributes to the character of the site and adds to amenity by:

- Getting specialist landscape inputs to ensure outdoor spaces are given appropriate attention and design treatment.
- Protecting and enhancing existing habitat and ecology.
- Retaining and incorporating mature trees and existing vegetation into the landscaping.
- Planting trees and vegetation which are local to the area, enhancing the existing or desired future character of the area.
- Incorporating changes in level, landmarks, views and significant site elements into the landscape design.
- Considering water sensitive urban design methods.
- Using a mixture of hard and soft landscape treatments.

Guideline 1 (above right)

Cheonggyecheon Stream, Seoul, was a restoration of an urban stream to create a large public space. and restore the ecology.

Guideline 1 (below right)

Artists impression of the New Town Basin Park Terraces, Whangarei. Public space should have a mixture of hard and soft landscaping.



Guideline 2

Incorporate planting and landscape design into all spaces around the building including public outdoor spaces, sreetscapes, entranceways, pathways and carparks.



Guideline 3

Consider incorporating planting into the street furniture zone of the footpath. This contributes to the visual appearance of the development as well as creating a buffer between the footpath and the roadway. It is important to consider:

- Placement and species used (at mature size) to ensure root systems do not damage underground utilities or buckle the footpath surface.
- The canopies of trees do not disrupt overhead lighting, verandahs or building façades.
- Plants are at an appropriate height so as to not to disrupt sightlines between drivers and pedestrians, or create cover for antisocial behaviour.
- Planting is positioned and maintained so it does not disrupt through routes.

Guideline 3 (above right)

Consider street tree and street planting height and width so it does not disturb its surroundings.

Guideline 3 (below right)

Position and maintain planting on streets so it does not grow into pedestrian pathways.



The tree height and width at maturity should not



Guideline 4

Use trees and vegetation to soften and mitigate the effects of blank walls and solid forms, and screen private outdoor areas, garages, parking, rubbish storage and other service areas.





Guideline 4 Use planting to soften blank walls that face on to public or active areas.

Guideline 5

Think about the scale and height of trees at maturity before they are planted. They should not block significant views, over shade or disturb buildings or infrastructure.

Rules of Thumb

• Allow trees to grow in balanced and healthy shape. Provide enough permeable space around plants and trees to allow access to rainwater.



Guideline 5 Ensure plants can grow healthy to maturity without disturbing their surroundings or causing issues in the future.

Guideline 6

Incorporate water sensitive urban design techniques into your landscape design to reduce the flow of stormwater and increase its quality. This will help achieve ecological benefits as well as public amenity benefits (see 2.4 Stormwater and Hazards).

Rules of Thumb

 Minimise areas of hard surfacing (impervious surfaces) within the development to decrease stormwater runoff and increase water quality. Permeable surfaces, such as gravel or porous paving, can reduce stormwater run-off and are often more attractive then large areas of asphalt.

Guideline 6 (above right)

Rain gardens are a water sensitive urban design technique which can help reduce stormwater runoff.

Rule of Thumb (below right)

Permeable surfaces can be a good design alternative to decreasing stormwater runoff.





Guideline 7

Consider incorporating living roofs and walls into your building design to add amenity, character and stormwater filtration.

Guideline 7 Living walls provide many benefits to the appearance of the building as well as providing heat and noise insulation and intercepting stormwater runoff.

Guideline 8

Landscaping should be designed to reduce opportunities for crime. Avoid dense planting of tall shrubs close to pathways and between the building in the street.

Ensure tree foliage, bushes or fences along paths do not block views and make people feel trapped.

Guideline 8 Consider the height of planting at maturity to avoid hidden areas and places of entrapment.

Guideline 9

Consider retaining roof or balcony runoff for reuse in buildings and landscapes areas, i.e. watering gardens, flushing toilets.

6.4 SERVICE AREAS

Chapter Objectives

- Service areas are designed as an integral component of the commercial development, and are fit for purpose for building occupants.
- Service areas do not physically or visually detract from the on-site and off-site amenity of the development.



116

public.

Distinctive Connected Attractive Inclusive Sustainable

Servicing is an important component to commercial

development, both in terms of

providing efficient day-to-day

servicing, such as deliveries and waste collection, and ensuring service areas are appropriately located and designed to not detract from the development. Consider where service areas are placed on site, how they are used, and where they can be seen by for both occupants and the

Guideline 1

Consider the following essential services that should be provided on site for commercial businesses and occupants:

- Rubbish and recycling storage and easy collection.
- Secure, easily accessible storage.
- Loading zones or drop-off points for supplies and deliveries (including courier deliveries) to all uses within the development.



Guideline 1 Consider location of existing loading zones on the street which could be used.

Guideline 2

Consider the best storage location for rubbish and recycling as early as possible within the design. Position to minimise negative visual, noise or odour effects and to enable practical use.



Guideline 2 Rubbish and recycling should be located in an accessible, practical location which does not have negative effects on its surrounds.

Guideline 3

Within smaller developments, consider servicing from the street through dedicated loading zones.



Guideline 3 Loading Zone, Rathbone Street, Whangarei. This loading zone services the small businesses along Rathbone Street.

Guideline 4

Consider providing designated service areas and separating them from pedestrian areas beside, behind or within the commercial building. The advantages are:

- It separates access for service vehicles to customer vehicles.
- It can serve multiple developments and businesses.
- Hides service activities behind the development.
- It can be lockable after hours.



Guideline 4 Position service areas where they are out of view of the building frontage, hidden beside or behind the development.

Guideline 5

If you cannot position service areas beside, behind or within the building, consider:

- Positioning it where it is visually unobtrusive or can be screened using fences or planting.
- Positioning it where it is not clearly visible from the street or adjacent public areas.

Guideline 6

Consider adjacent residential uses when positioning service areas. Position them where they can be visually and acoustically screened and can avoid creating high levels of noise, vibration, dust or other nuisance (throughout the day and at night).



Guideline 5 Separate service areas and rubbish storage areas should be positioned and/or screened from public spaces.



Guideline 6 Consider surrounding residential activity and position service areas where they can be screened visually and acoustically.

Guideline 7

Consider access to service areas for both building occupants and contractors as early as possible within the design:

- Design service areas to provide easy access, and vehicle manoeuvring for contractors, rubbish and recycling trucks, deliveries and other large vehicles.
- Aim to have a separate entrance point for service vehicles and building occupants.



Guideline 7 Consider access to service areas for both contractors and building occupants as early as possible.

Guideline 8

Consider integrating or co-locating service areas between businesses or units within a development. The use of existing service lanes is encouraged, particularly where they serve properties on both sides.



Guideline 8 Mural by Mateus Bailon, Butter Factory Lane, Whangarei. Service areas can be shared between different businesses.

Guideline 9

Think about the design and position of building services. Place mechanical and/or electrical equipment/utilities underground, on rooftops or within landscaped areas where they can be visually buffered.



Guideline 9 When positioning utilities on rooftops consider their position as viewed from the street or public spaces.

Guideline 10

Include appropriate lighting within service areas for safety and security.

Guideline 11

If appropriate, consider using service lanes as locations for pedestrian thoroughfares. This only works when there is appropriate safety measures and activation.



Guideline 10 Opera House Lane Wellington. This service lane is appropriately lit as it is often used as a pedestrian thoroughfare.



Guideline 11 Eva Street, Wellington. Service lanes can be enhanced to become attractive short cuts between blocks for pedestrians.

POSITIONING VEHICLES

Carparking is an important facility that allows people who commute access to commercial activities. When not well located or designed, our commercial environments can become dominated by vehicles, roads and carparking. Vehicle movement and carparking can often be given priority in commercial environments when pedestrian movement is fundamental when it comes to generating life and activity within a commercial centre. Large areas of surface car parking can interrupt pedestrian movement and active street frontages and can have a negative impact on the amenity and vitality of commercial areas and public spaces. Careful consideration needs to be given to locating and designing car parking to ensure amenity values can be maintained and that access to alternative modes of transport, such as walking and cycling, can be promoted.



ON-SITE CARPARKING

Chapter Objectives

- On-site parking is appropriate, without compromising streetscape character, landscape quality or pedestrian amenity and safety.
- On-site parking considers access, ease of movement and safety of pedestrians as well as vehicles.



7.1

Distinctive Connected Attractive Inclusive Sustainable

activitv

and

of

it

spaces.

Guideline 1

Consider the need for carparking on-site in relation to:

- The building's proximity to other parking.
- The building's proximity to amenities, public space and residential areas.
- The building's proximity to alternative transport i.e. public transport, car sharing, walking and cycling.
- The density of development and the local area.
- The site's capacity to accommodate parking.



Guideline 1 Some developments provide secure bicycle parking to act as an alternative to on-site parking and encourage cycling (see 7.4 Bicycle Use & Parking).

Guideline 2

If on-site parking is required, consider:

- The position of the building and associated public space.
- Parking demand and vehicle types to determine the amount of parking required.
- Site dimensions and relevant planning controls to determine the shape, height, and position of the parking area.
- Land value and constraints to determine the type of parking (e.g. underground, elevated or surface).



Guideline 2 Dent Street, Whangarei. Surface parking can take up significant amounts of space. Consider the best use of space when determining the type of parking.

Guideline 3

Aim to design on-site parking to be identifiable, efficient, attractive, safe and logical for all users to negotiate, including pedestrians, cyclists and drivers.



Guideline 3 This carpark uses colour changes and clear signage to help pedestrians navigate the environment and slow vehicle speeds.

Guideline 4

Position on-site parking beside, behind, below or above the street edge to maintain an active frontage. Carparking between the street edge and building frontage should be avoided.

Rules of Thumb

• When you have surface parking, consider 'wrapping' it with other more active uses to maintain a positive street frontage. Reduce the negative visual effects of carparking by positioning it behind, beside, below or within the upper floors of the building.





Guideline 5

Where commercial buildings back on to carparking, consider:

- Adding windows which face the carpark to maintain surveillance.
- Creating private entrances to upper floor or rear uses such as offices and residential units. Adding surveillance and activity.
- Linking the carpark to the front entranceway with safe and direct pedestrian links.
- Avoiding creating blank walls by adding some articulation to the façade.



Guideline 5 As carparking is at the back of the building consider safety and amenity of this area for those using it.

Guideline 4 (above right)

Maintain active frontages by positioning carparking away from the building frontage and street edge.

Rule of Thumb (below right)

On-site carparking should be positioned behind and wrapped by active commercial uses.

Guideline 6

Give preference to basement, semi-basement or under-croft parking whenever possible as it conceals parking underground and allows more active uses to be placed on site.

- Semi-basement parking should not be more than 1.2m above ground level to avoid blank street edges.
- Allow natural ventilation to the basement and under-croft car parking areas, where possible.
- Ventilation grilles, screening and car park openings should be well integrated into the façade and landscape design of the development.
- Provide safe and secure access to parking areas for building users.

Guideline 6 (above right)

This ground floor carpark has created a blank wall along two active street frontages.

Guideline 6 (below right)

Diagramme showing basement and semi-basement parking.



Guideline 7

Consider shared carparking between multiple commercial activities. These are beneficial because:

- It is a more efficient use of land, particularly where activities are used at different times of the day.
- It can reduce areas of asphalt, making it more cost effective.
- It focuses activity within one area creating passive surveillance that helps reduce crime and fear of crime.



Guideline 8

Avoid positioning carparking at the front of the building as it can disrupt active frontages. If carparking is positioned along the building frontage:

- Ensure the building accounts for most of the front façade.
- Avoid vehicle manoeuvring areas that conflict with pedestrian entrances or connections between the house and the street.
- Incorporate planting, fencing and lighting which will create an attractive entrance and soften the appearance of parked cars as viewed from the street.
- Create a strong and visually interesting entranceway.

Guideline 8 (above right)

Vinery Lane, Whangarei. Carparking along streets or public space should have a planting buffer to soften its appearance.

Guideline 8 (below right)

Buildings should take up most of the street frontage.



Guideline 9

If positioning carparking on the upper floors of buildings, aim to articulate the façades to provide human scale and visual interest, both during the day and at night.



Guideline 9 *The Crossing, Christchurch*. This carpark building uses perforated panels to create visual interest on the façade.

Guideline 10

Ensure parking structures are adequately ventilated and control the flow of water, and are designed to be easily maintained. Where natural ventilation is not possible, consider mechanical ventilation.



Guideline 10 Wellington Airport, Wellington. This carpark has a façade treatment which adds visual interest as well as allowing natural ventilation.

ACCESS & WAYFINDING

Chapter Objectives

- Access to on-site parking is visible to approaching vehicles and creates a positive contribution to the street and active frontages.
- Access to on-site parking is well designed to ensure pedestrians and cyclists are safe, have ease of movement and are not disrupted by vehicles.
- The carpark is designed so pedestrians walking to and from their vehicles are safe from moving vehicles and have direct and intuitive paths to the building entrances and public spaces.
- Signage within carparks is well integrated into the building design and is understandable for both drivers and pedestrians.



130

Distinctive Connected Attractive Inclusive Sustainable

7.2

Carparks concentrate vehicles in one location and it is

important to inform drivers

through clear access points

as well as wayfinding signage.

Equal consideration needs

to be given to pedestrians

at vehicle access points and

in carparks. Having parked

their cars, drivers are now pedestrians in an environment which is traditionally dedicated

and designed for vehicles.

Guideline 1

Aim to design vehicle access points to respect other street functions. They should be located to avoid active street frontages, verandahs, street trees, street furniture, services and onstreet carparking.

Rules of Thumb

• Where possible, have access to carparking on secondary streets to limit impact on pedestrians and vehicles.



Guideline 1 When positioning vehicle access, be considerate of other street functions and infrastructure.

Guideline 2

Consider vehicle access points as they can form a significant part of the street edge.

- Avoid designing oversized vehicle entrances that form large holes in building façades.
- Recess carpark entries from the main building line.
- Incorporate planting and fencing to create an attractive entranceway.

Rules of Thumb

- Vehicle accessways should be made as small as safely possible. The recommended width based on a typical passenger car are:
 - For one lane: 3.6m (3m accessways & 300mm kerb either side)
 - For two lanes: 6.1m (5.5m & 300mm kerb either side)

The recommended height clearance is:

- For a typical Passenger Car: 2.2m
- For a typical truck: 3.4m 3.7m

Guideline 2 (above right)

A vehicle entranceway which breaks up the active frontage as well as creating a large hole in the building façade.

Guideline 2 (below right)

This carpark entranceway is attractive due to its size, the use of the lighting and façade materials.





Guideline 3

Consider the design and pedestrian safety at vehicle crossings and vehicle access points (see 3.2 Building & Site Access).

- Make them as narrow as possible to reduce vehicle entry and exit speeds.
- Give priority to pedestrian footpaths at vehicle crossings by maintaining a level thoroughfare for pedestrians. This will promote accessibility and slow vehicle exit and entrance speeds.

Guideline 4

Provide adequate signage and wayfinding to signal vehicle entry points. Consider:

- Locating signage at a high level large and clear, as it needs to be viewed at a distance by a moving vehicle.
- Maintain a good balance between creating a visible car park entrance without creating visual clutter.





Guideline 4 (above right)

Make signage large, recognizable and positioned at an appropriate height on the building to be seen from a distance.

Guideline 4 (below right)

Appropriate signage and wayfinding should be incorporated within the carpark to help pedestrians and vehicles navigate the space.



Guideline 3 Consider pedestrian safety and convenience at vehicle crossing points.

Guideline 5

Think about pedestrian movement within carparks and create safe and convenient paths by:

- Making walking routes through carparking areas clear, direct and intuitive as well as accessible for all.
- Consider pedestrian desire lines and the shortest route when designing pedestrian routes.
- Creating pedestrian crossings where they cross vehicle paths.
- Creating pedestrian routes to and from carparking areas that are safe and well-lit.
- Locating pedestrian access into carparks in a prominent, visible and well-lit part of the building or street.
 Pedestrians should not need to venture through a side or rear entrance to access carparking.
- Creating pedestrian areas where people may need to congregate, i.e. around ticketing machines.
- Avoiding designing layouts that result in dead-ends or create points of entrapment.

• Within carparks, locating accessibility parking near entrances or along key pedestrian routes.



Guideline 5 (above)

Pedestrians walking through a carpark with limited pedestrian amenity and connections.

Guideline 5 (right)

A good and bad example of a carpark design for pedestrian safety and convenience.

There is no pedestrian connection between the carparks and the front entrance or between the street and entrance. Therefore pedestrians are required to / walk through the carpark.



There is a sinale

access point to the

carpark.

Guideline 6

Where a 'shared space' access way is proposed, (i.e. the driveway or service lane is shared by pedestrians and cars), pedestrian safety and amenity should take priority over vehicles. This can be achieved by:

- Providing a range of high quality, low maintenance materials.
- Avoiding speed bumps and using other measures, such as landscaping and surface treatment, to reduce car speeds.
- Ensuring thoroughfares are safe, well lit and has passive surveillance.



Guideline 6 (above right)

Where access ways are shared by vehicles and pedestrians, ensure there is appropriate footpaths and safety for pedestrians.

Guideline 6 (below right)

Fort Lane, Auckland. An example of a service lane which is used as a pedestrian thoroughfare with appropriate levels of passive surveillance and lighting.

ŝ

7-3ON-STREET CARPARKING

Chapter Objectives

• On-street parking does not compromise streetscape character, landscape quality, pedestrian amenity and safety, or traffic movements.



On-street

dominance.

Distinctive Connected Attractive Inclusive Sustainable

carparking

be more positive than on-

site parking as it does not

disrupt the ability to provide active frontages. However, on-street parking can make a carriageway appear much wider and still lead to vehicle

On-street parking can be provided in the form of parallel parking and diagonal parking.

can

Guideline 1

Consider on-street parking as an alternative to on-site parking. The advantages of onstreet parking include:

- The number of vehicle access ways is reduced allowing for a continuous and accessible footpath and consistent streetscapes.
- As people are moving to and from their vehicles, more activity on the street makes them and building entranceways safer.
- Parked cars create a buffer between moving traffic and pedestrians on the footpath.
- Parking spaces are more accessible and used more frequently, therefore fewer spaces are needed overall.
- On-street parking can be low-cost to construct.
- Enabling passive surveillance as pedestrians can keep an eye on vehicles.

Guideline 1 (above right)

Passive surveillance is created between vehicles and pedestrians with on-street parking.

Guideline 1 (below right)

With well-designed footpaths and appropriate landscape design, on-street parking does not need to create an unattractive environment.



Guideline 2

The disadvantages are:

On-street parking can

dominant environment, and make the $\$

lead to a vehicle

carriageway appear larger.

- It is within the public street, therefore cannot be allocated.
- Canaffectthewidthoftheroad, especially with diagonal or perpendicular parking.
- On-street parking (especially diagonal parking) may not be appropriate in every situation as it can disrupt the movement of traffic on busy roads.
- Can lead to increased vehicle movements and car dominance, if not well designed.

On-street parking could disrupt vehicle movement

137

Guideline 2 On-street parking can make roads appear wide and harder for pedestrians to cross, and can create car-dominant environments.

Guideline 3

Provide breaks in rows of on-street parking. This allows space for street trees to soften the impact of parking and allows for safer and more accessible road crossing for pedestrians.

Rules of Thumb

• Apply a break in the form of tree bays, crossing points or pedestrian rest areas every 6 carparking spaces.



Guideline 4

On-street parking should be designed to minimise the visual impact to the streetscape and adjacent buildings by having a minimum setback of 3.0m from the front boundary and a setback of 1.5m from other boundaries.



Guideline 4 Parking should be setback from a main building façade by a minimum of 3m.

Guideline 3 (above right)

Creating a continuous row of on-street carparking can create an unattractive, car-dominant environment.

Guideline 3 (below right)

Planting bays help break up and soften the appearance of on-street parking.

BICYCLE USE & PARKING

Chapter Objectives

- Bicycle parking is designed to be easily accessible, safe and secure for the public and building occupants. •
- Associated facilities are provided to accommodate and encourage cycling and are conveniently located, well designed and accessible.



parking

cycling

congestion.

to

developments.

Distinctive Connected Attractive Inclusive Sustainable

With increasing popularity

for walking and cycling within

Whangarei urban areas, it is

important to consider bicycle

facilities within commercial

dependency and provide a more cost-effective alternative

spaces. Cycling also offers health benefits to occupants and helps reduce traffic

building

associated

carparking

Encouraging

can lower car

and
Guideline 1

Encourage cycling by providing easily accessible and secure bicycle parking for all, including employees, visitors and customers.

Rules of Thumb

• Where cycle parking is needed for short periods, for example in main shopping areas, small clusters of stands in active locations are better than larger groupings at fewer sites.



Guideline 1 Parking should be setback from a main building façade by a minimum of 3m.

Guideline 2

Consider providing bicycle parking for visitors and customers as close to the front entrance of the building as possible to ensure it is accessible and well overlooked.



Guideline 2 Position bicycle parking as close to the building entrance as possible and ensure it is accessible.

Guideline 3

Consider the safety and security of bicycles and cyclists by:

- Locating bicycle parking where it is visible and well overlooked by passers-by and activities.
- Providing good quality lighting. Parked bicycles and the routes to and from them should be well-lit.
- Ensuring people can securely lock their bicycles onto something secure and immovable.



Guideline 3 Parklet, Hammersmith and Fulham. These bicycle racks are well overlooked by people, businesses and surrounding buildings.

Guideline 4

Support cycling by providing facilities such as secure storage facilities, well-maintained changing rooms, showers, lockers, wayfinding signage and air pumps for employees.



Guideline 4 Provide secure on-site bicycle storage and other facilities for staff to encourage cycling.

Guideline 5

Position bicycle parking where it will not cause an obstruction for pedestrians and vehicles moving about the site.

Rules of Thumb

• Consider the spacing of clustered bike stands. It is recommended that they be spaced 1m apart. If they are too close together, they will be difficult to use.



Guideline 5 Christchurch City Council Building, Christchurch. Cycle parking is provided but does not disrupt pedestrian movement.

Guideline 6

Design bicycle parking to be attractive and robust, ensuring it fits in visually with its surroundings.

7.5 CARPARK LANDSCAPING

Chapter Objectives

• Surface carparks are designed to incorporate quality landscape design to improve the appearance and safety of the carpark for users.



144

Consider

Distinctive Connected Attractive

Surface carparking should

avoid appearing as a large

expanse of hard surface and

be dominated by vehicles.

quality landscaping within the carpark to help improve safety and amenity, and to create an attractive outlook for employees and visitors within the commercial development.

incorporating

Inclusive Sustainable

Guideline 1

Minimise concreting and paving to that which is necessary for safe and efficient vehicle and pedestrian access. This reduces costs and allows more space for tree planting and landscaping.



Guideline 1 Unnecessarily large vehicle manoeuvring areas should be avoided.

Guideline 2

Where there is surface parking consider:

- Using planting between parking bays.
- Incorporating trees into the landscaping to soften and green the carpark.
- The appropriate tree species and maintenance (i.e. pruning of lower branches so they do not interfere with vehicles and pedestrians).
- Incorporating low planting less than 800mm in height.

Guideline 2 (above right)

Use a mixture of trees and low planting within the design of carparks.

Guideline 2 (below right)

Bascule Park, Whangarei. Planting between parking bays helps to soften the appearance of carparking.





Guideline 3

Use water-sensitive design techniques within parking areas.

Rules of Thumb

• Water-sensitive design techniques such as rain gardens will direct stormwater runoff from parking areas to planted filtration beds. These will help absorb and filter out pollutants before they enter stormwater outlets or natural water ways.



Guideline 3 Rain gardens are an example of a watersensitive design technique that can help with stormwater runoff.

Guideline 4

Design carparks to maximise available space for greenery such as in between parking bays, borders and areas left outside of turning circles.



Guideline 4 Planting and landscape design should be incorporated as early as possible to maximise amenity.

Guideline 5

Use different surface treatments to define spaces such as parking, vehicle areas and pedestrian routes.

Rules of Thumb

• When providing kerb and channel arrangements include kerb cuts which are essential for accessibility.



Guideline 5 Use different materials to define areas, such as pedestrian pathways, from vehicle manoeuvring areas.

Guideline 6

Care needs to be taken where trees are provided to ensure they are given enough protection from moving vehicles, and do not disrupt passive surveillance.

Rules of Thumb

- Low planting should not reach a height of more then 800mm as that could create areas of concealment (hiding spaces).
- Crown lifting (trimming of low level branches) should be to a height of 2m to provide clear views past, as well as a walking space below, branches.
- Trees should be considered at their mature state to ensure they do not out grow the space where they are planted.

Guideline 6 (above right)

Consider trees at maturity so they do not continue to grow or dominate the space.

Guideline 6 (below right)

Maintain low planting and tree branches to the appropriate height to allow views past.





BULDING DESIGN

The building needs to be designed to have safe and easy internal access. It also needs to perform in a way that makes the spaces useable. Well designed internal layouts, good access, quality building materials and appropriate heating, cooling and ventilation techniques will ensure the building is functional and comfortable for all occupants.



8.1

Commercial development needs to accommodate a steady flow of people in, out and within the building. Well designed and well arranged internal rooms and spaces can help ensure clear and easy access for all occupants. Spaces should also be easy to understand with clear differentiation between different functions.

> Distinctive Connected Attractive Inclusive Sustainable

INTERNALACCESS & LAYOUTS

Chapter Objectives

- Internal spaces are designed to be accessible for everyone regardless of age or ability.
- Spaces are easy to move through and easy to understand with clear differentiation and appropriate way-finding, and plenty of space for people to circulate.



Guideline 1

Consider universal design and accessibility at the earlier stages of the design, by:

- Allowing enough circulation space to move around and on to furniture.
- If providing bathrooms, making at least one large and accessible.
- Providing convenient wheelchair access into and within the building. This includes easy access to reception areas and workplace or public amenities such as bathrooms or kitchens (if provided).
- Creating larger, open plan spaces to allow for more flexibility and easier adaptation of commercial spaces.
- Providing a range of shelving, desk and seating heights for accessing products and services.

Guideline 1 (above right)

Allow a generous amount of circulation space around shops.

Guideline 1 (below right)

Consider universal design at key areas such as reception desks.



Guideline 2

Define and separate areas for circulation, working spaces, meeting rooms and communal areas. In commercial offices and retail spaces, clearly define areas for the public and private areas for employees.

Rules of Thumb

• Avoid wall and floor treatments which are highly patterned or reflective. These can increase stress and be disturbing to people with neurological impairments.



Guideline 2 Floor materials and spacial dividers are used to define areas with different purposes.

Guideline 3

Circulation space should allow easy movement for everyone, regardless of age or ability, between all spaces. Consider:

- Planning movement and circulation space as early as possible within the design.
- How many people will move through the building.
- Designing access routes that are wide, level and unobstructed by furniture.
- Designing corridors and entranceways to be well lit and easy to navigate.
- The need for separate corridors within the development. Minimising corridors can make a space more flexible. If corridors are unavoidable, consider providing wider spaces to allow wheelchair access.
- Avoiding small steps and ledges and, where possible, create ramps.

Rules of Thumb

- Long corridors should have a clear width of 2m to enable people to easily pass each other moving in either direction. For shorter corridors of less than 6m long, a width of at least 1.2m may be acceptable.
- Circulation space should be a minimum of 800mm around furniture and fittings.

Long corridors, such as those within apartment buildings, should be 2m wide to allow 2 people to pass one another comfortably.





Rule of Thumb Consider the length and width of corridors to allow accessibility.



Rule of thumb Accommodate everyone by providing a generous amount (800mm minimum)of circulation space around furniture.

Guideline 4

Allow people to move between floors with ease.

Rules of Thumb

- In multi-storey buildings, have multiple access types to upper floors such as stairs, elevators and escalators. These should be accessed from a main foyer (or within proximity of each other) and well overlooked by staff.
- Within lifts, provide both audio and visual cues for navigation between floors.





Guideline 5

Ensure people know where to go once entering a commercial space:

- Use wayfinding through clear lines of sight and design elements. Signage with clear information is also helpful within large developments.
- Use visual indicators, not level changes, to mark spatial transitions. Materials and colours can be used to indicate different spaces and functions.



Guideline 5 This shop frontage has level access from the street and has a clear line of site from the entrance to the front desk.

Guideline 4 (above right)

Position public stairs and elevators within main foyers in similar locations to ensure equal access for different users.

Guideline 4 (below right)

Consider passive surveillance of circulation areas, such as positioning them near reception desks.

BUILDING PERFORMANCE

Chapter Objectives

- The building has enhanced performance and creates a comfortable and healthy environment for occupants.
- The building design incorporates passive and natural techniques when it comes to solar design, drainage, ventilation, water systems, waste and lighting throughout all stages of its lifecycle.



154

Distinctive Connected Attractive Inclusive Sustainable

82

performance

inviting. Considering

is

Guideline 1

Create a comfortable and healthy internal environment by heating and cooling spaces using passive solar design techniques.

- Provide adequate daylight access to spaces.
- Allow for opportunities to naturally ventilate through opening windows and adjustable vents.
- Maximise thermal mass (materials that can absorb and retain heat) of floors and walls where direct sunlight enters for significant parts of the day.
- Insulate walls, floors and ceilings in order to reduce long-term heating and cooling costs.
- Double-glaze external windows and doors to improve the acoustic and thermal performance.
- Use shading devices, such as eaves, awnings, louvres and planting.
- Consider green rooves and walls.
- Install solar panels for water heating or electricity generation. These are more cost effective and well integrated if considered at the earlier stages of development.
- Choose materials and colours that reflect or absorb heat, where required.







Guideline 1 (above)

Provide daylight access to internal spaces, especially communal areas where everyone can benefit.

Guideline 1 (above right)

Deloitte Building, Christchurch. Use external louvres to help control internal shading throughout the day.

Guideline 1 (below right)

Christchurch Library, Christchurch. Orientation of windows, awnings and eaves can help control the amount of natural light and heat entering a building.

Guideline 2

When designing the building consider:

- Deflection keeping the water away from potential entry points.
- Drainage removing any water that does enter.
- Drying allowing any remaining moisture to be removed by ventilation or diffusion.
- Durability providing durable, low maintenance materials.

Guideline 3

Design the building layout to increase the potential for natural ventilation. Design solutions to consider are:

- Stack ventilation, which works through vertical air movement where warm air escapes at higher levels and cool air is drawn in at lower levels. This is best applied in two-storey buildings.
- Cross ventilation, which works through pressure difference on different sides of the building. This is best applied to narrow buildings, dual aspect and corner aspect units.
- Ventilation through the cycling of air (hot air rising and cool air falling) to redistribute heat through the house.

Rules of Thumb

- To allow for cross ventilation, the breeze path should be less than 15m, windows should be at least 1m² in area and there should be no more than one interior door in the path.
- To allow for stack ventilation, the outlet opening should be 3m higher than the inlet.



Guideline 3 Types of natural ventilation include stacked ventilation, cross ventilation and heat redistribution.

Guideline 4

Consider ways to ventilate and move heat and air around the building:

- Provide windows on external walls to naturally light and ventilated spaces.
- Provide windows on two or more walls within a room, or different sides of a unit to allow for natural cross ventilation.
- Consider mechanical techniques such as fans or ducting to circulate cool air in the summer and warm air in the winter.
- Ventilate bathrooms and kitchens to the outside to prevent a build-up of moisture.
- For internal spaces such as service areas, corridors and bathrooms, consider skylights, fanlights, solar tubes or clerestory windows which provide natural light and ventilation.
- Consider alternative or secondary fresh air sources when environments require the closure of windows for noise reduction (i.e. mixed use developments).

Guideline 4 (above right)

Openable windows are a good alternative to mechanical ventilation options.

Guideline 4 (below right)

Consider clerestory windows to create opportunities for ventilation and natural light in areas which do not have access to external walls.



Guideline 5

Improve the efficiency of water systems and encourage water conservation by:

- Insulating the hot water system.
- Installing water-saving devices such as flow regulators, dual flush toilets and tap aerators.
- Storing and re-using stormwater/ rainwater or installing grey water systems to be used for toilet flushing and irrigation.



Guideline 5 Meridian Energy head office, Wellington. This commercial office building uses 70% less water due to water efficiency techniques.

Guideline 6

Reduce the reliance on artificial lighting by:

- Providing dimmable lighting to allow for a range of light level requirements.
- Using separate lighting circuits for flexibility of use.
- Using energy efficient lighting, such as compact fluorescent lights.
- Using motion sensor lighting in common areas, meeting rooms, stairwells, entrances, carparks and for outdoor security lighting.



Guideline 6 Use sensor lighting in common areas of commercial buildings to increase energy efficiency.

Guideline 7

Address acoustics and reduce noise transmission by:

- Considering the layout and orientation of the commercial development and its openings.
- Positioning building entrances and exits, roller doors and lifts as far away as possible from residential activity.
- Using sound buffers such as planting, acoustic wall and floor systems, insulation, acoustic cladding panels, double-glazing, high-mass construction (e.g. masonry and concrete), or separated and/or staggered room arrangements.



Guideline 7 Consider how to accommodate areas of high noise levels by positioning and orienting spaces and using buffers.

Guideline 8

Aim to minimise waste during all stages of the building's life cycle, from design to construction and demolition by:

- Incorporating existing built elements on site into the development.
- Recycling and reusing demolition materials.
- Specifying building materials that can be reused and recycled.
- Specifying project materials to avoid an oversupply.
- Using standard product sizes as these are often efficiently produced.
- Designing for durability, adaptability and flexibility.

Guideline 9

When selecting building materials consider:

- Using durable and low maintenance materials that will weather well, reducing repair and maintenance costs.
- The cost of the material over its lifetime from the installation, maintenance and removal.
- The embodied energy of a material, including the energy used to create the material as well as the manufacturing, transportation, installation, maintenance and disposal of the material.
- Using materials that can be reused and recycled at the end of the building's life.
- Using locally-sourced materials to reduce transportation costs.
- Avoiding contamination of the environment, for example zinc and copper claddings which can contaminate stormwater.
- Materials that are graffiti-resistant and easily cleaned.

Guideline 9 (above right)

Tanguay Furnishings, Coarchitecture. Timber is a good example of a sustainable material used in commercial buildings.

Guideline 9 (below right)

*T*3 West Midtown, DLR Group. Timber can be used to create adaptable spaces.



Guideline 10

Contribute to sense of place and identity by retaining, refurbishing, adapting and reusing existing building and building materials instead of demolishing them.

Rules of Thumb

• Many older buildings are built with high quality materials, generous floor-to-ceiling heights and modular structures which can be easily adapted to commercial and residential use.



159

Guideline 10 *City Gallery, Wellington*. Previously the public library, this building was retrofitted and repurposed rather then demolished.



Private Bag 9023, Whangārei 0148, New Zealand Forum North Building, Rust Avenue, Whangārei Ruakākā Service Centre, Takutai Place, Ruakākā P: +64 9 430 4200 E: mailroom@wdc.govt.nz W: www.wdc.govt.nz Facebook.com/WhangareiDC