

Oga Te Kauwhata Urban Design Guide Living Zone, Living Zone (new residential) and Living Zone (ecological)

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Oga1 Purpose of Urban Design Guidelines

These guidelines record urban design concepts that are to be considered during the resource consent process. Council is seeking to foster a collaborative approach with developers to encourage high quality outcomes that maximise benefits to the developer, resident and community. This can be achieved by embracing these guidelines and pursuing innovative designs rather than adhering to technical minimal standards.

These guidelines focus on the subdivision consent because it is of fundamental importance to achieving urban design outcomes. The future character of neighbourhoods is largely determined by the street pattern, section sizes and shapes and relationship to open spaces/community facilities. In contrast to traditional subdivision that involved removing natural features and piping watercourses, the emphasis here is upon taking advantage of these features and using them to create identity and to reflect increasing community interest in environmental issues.

The desired urban design outcomes are

- Subdivisions that integrate with the natural environment, and cultural and heritage features
- A connected street pattern
- Attractive streetscapes
- Section shapes that create private outdoor living courts on the sunny side of a house
- Open spaces and community facilities that have street frontage for surveillance and amenity reasons
- Low impact stormwater management integrated with streetscapes and open space.

The sections entitled **General Design Considerations**, **Street Network** and **Residential Subdivision** present design principles that should be followed. How these principles can be integrated into a design is illustrated in the **Overall Examples** section.

An **Assessment Criteria** section summarises the key issues to assist the public in preparing a resource consent applications and Council in assessing applications.

The **Te Kauwhata Environment** section describes the local environment and shows how development should connect with natural features.

Oga2 General Design Considerations

Oga2.1 Integrating Towns into the Natural Environment



Figure 1: Cliff Street Raglan connects the coastline and town more positively than a walkway behind back fences.

Urban design should integrate the natural environment into the public realm as a feature in the town's layout to reinforce and enhance character. A key approach to the successful integration of the natural environment with towns and villages is to ensure that these areas have high quality public access that forms part of a wider walkway network with high levels of street interface. Lakes, streams, wetlands and parks should have as much perimeter street frontage as possible so that they function as town landmarks and are overlooked and therefore safer to use. Successful examples are the Waikato Esplanade in Ngaruawahia and Cliff Street in Raglan (Figure 1).

Linking natural character areas/open spaces with good cycling/walking streets creates 'green corridors' that highlight a town's natural character. Over time the mature trees in these green corridors will create urban 'shelter belts' that will keep natural character in new residential areas.

Oga2.2 Earthworks

Earthworks for subdivision and dwelling development can have significant effects on landscape and village character. Developments should be designed to minimize the need for earthworks. This can be achieved through careful selection of road alignment and building platform location. Where retaining walls are needed for building platforms, these should remain low and generally be located at the rear of a property to minimize their visibility from the road.

Oga2.3 Waterways and Open Space

Fragmented and disconnected habitats are an important resource management issue for the ongoing survival of wildlife living near urban areas. In many circumstances there are opportunities to integrate ecological corridors and stands of vegetation into the layout of a town in order to create contiguous areas of habitat particularly along waterways.

Waikato District Plan - Waikato Section

Blue and green corridors are a name for natural and constructed waterways and landscaped areas of a certain area. Ideally, the linking of blue and green corridors forms one basis for the design of the street and pedestrian network for a town. Blue and green corridors also help to create interconnected areas of high amenity value and recreation for a community (Figure 2.)

The blue and green corridors create a framework for other low impact stormwater devices to feed into. These may include constructed wetlands, ponds, rain gardens and swales. Stormwater detention ponds should be located along waterways to reinforce green or blue corridors. If it is not possible to locate a detention pond beside a stream or lake then the detention pond must be located beside a neighbourhood reserve or a collector road to help form public open space with street frontage. Constructed wetlands, stormwater detention ponds (and neighbourhood reserves) located behind houses will not be accepted.



Existing streams and vegetation are often poorly treated by new developments if they are not integrated into the scheme. In this example much of the development backs onto the existing stream.



With careful integration streams and vegetation can become a valuable natural asset to the amenity of the new development. The site now offers improved pedestrian access (shown in brown) with road frontage to open space for passive surveillance.

Figure 2: Good and bad examples of integrating stormwater ponds into open spaces.
Courtesy of Kapiti Coast District Council

Oga2.4 General Design Key Points

- Identify natural features and consider how they can be used to enhance the development
- Incorporate natural features and corridors into public open space
- Ensure public open spaces are easily accessible, highly visible and connect to provide recreational as well as conservation objectives
- Enhance the ecological values of natural features
- Use low impact stormwater designs, and retain and restore open stream networks
- Design subdivisions and buildings to minimise the need for earthworks.

Oga3 Streets

Oga3.1 Importance of Streetscapes



Figure 3: Trees improve streetscape amenity

The character of streetscapes contributes significantly to the character and amenity of neighbourhood areas. Engineering standards are a common feature in District Plans and by necessity they focus on vehicle capacity and safety for pedestrians, cyclists and motorists. This Urban Design Guide focuses on streetscape design issues and how adjacent buildings or open

space also influence street types.

Trees are often the most important element in improving streetscape character (Figure 3.) Utility berms to allow service free areas for tree planting are proposed in the street types. Narrowing the perceived width whilst maintaining safe carriageway width is also proposed. Visual narrowing of the street improves character, slows speeds and makes pedestrian crossing easier. Different paving for parking bays, channels between parking/carriageway and street trees on kerb extensions in the parking bay depth are methods to achieve this.

A range of typical street type cross-sections has been coordinated with the Engineering Standards and is included in this section.

Oga3.2 Connectivity

A significant aspect of the structure plan is the requirement for a connected street network (Figure 4). The price of too many culs-de-sac is that all traffic is concentrated on the collector roads the culs-de-sac run off. As traffic flows increase the collector roads have to be widened (at rate-payer's expense) and become harder for pedestrians/cyclists to use. A lack of connectivity also discourages walking and cycling because of the greater travel distances and results in disconnected neighbourhoods (Figure 5). If a developer wishes to develop multiple culs-de-sac then they must provide sound reasoning, such as topographic constraints or retention of natural features. A reduction in lot yield will not be an adequate reason.

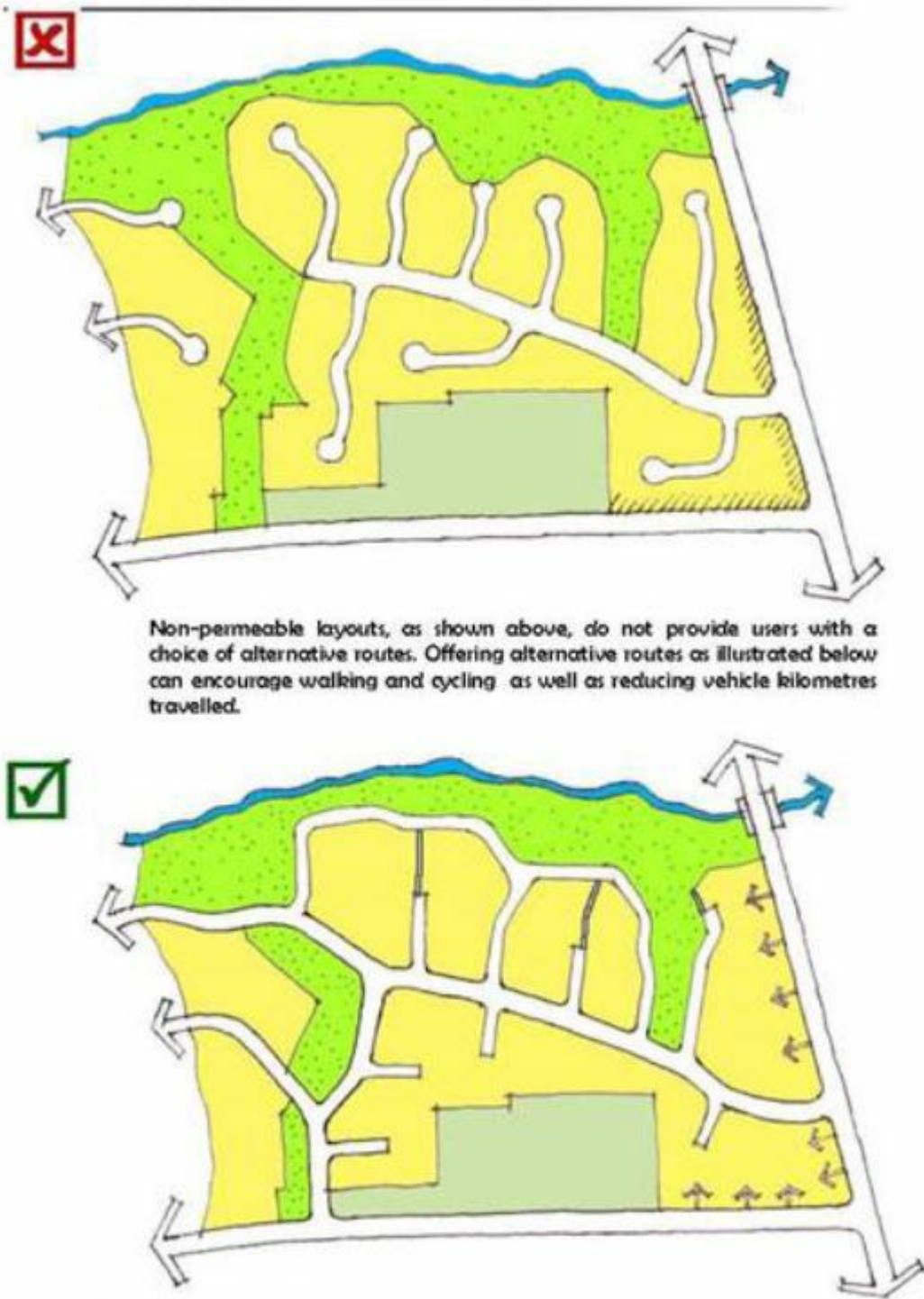


Figure 4: Comparison showing how a connected street network provides shorter routes and integrates natural feature.

Courtesy of Kapiti Coast District Council.

Oga3.3 Walkways and Lanes

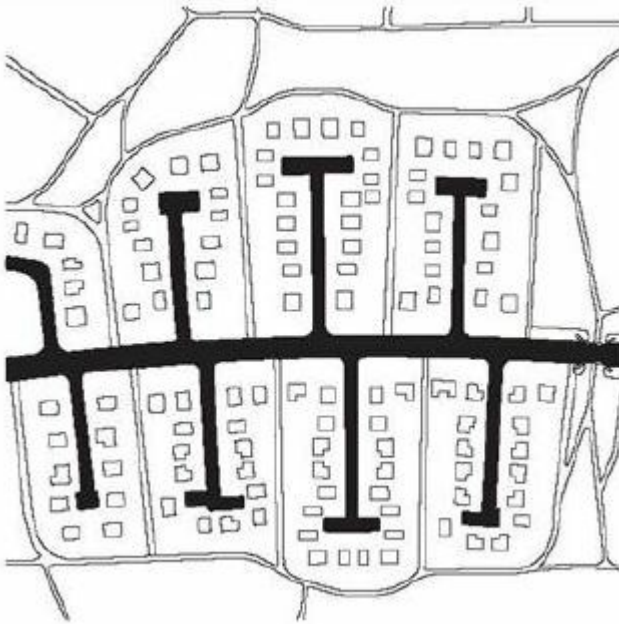


Figure 5: Collector Road links subdivisions but cul-de-sac local roads still leave a disconnected neighbourhood.

Pedestrian-only walkways used to connect culs-de-sac or streets are discouraged as they have surveillance and graffiti problems. Walkways will only be accepted where topography or natural features make a street connection difficult. In these situations the walkway should be 8 metres minimum width. Use of access drives to overlook the walkway (Figure 6) avoids close-boarded fences that make the walkway unsafe to use. Walkways should be straight and reasonably short so that people can see along the entire route.



Figure 6: Access drives and houses overlook walkway/park that links two streets. Courtesy of Kapiti Coast District Council.



Figure 7: Where an intersection cannot be formed on an arterial road a shared lane with properly formed footpath creates a better pedestrian/cyclist link. Courtesy Kapiti Coast District Council.

Oga3.4 Street Network Key Points

- Recognise that streets play a large part in determining the character of a town, and aim to create an attractive streetscape.
- Provide a connected street layout, including cycleways and walkways.
- Avoid culs-de-sac as much as possible. Where they do occur, limit their length and keep in a straight alignment.
- Ensure off-road routes are attractive and highly visible.
- Ensure streets comply with the applicable cross-section type and engineering standards.

Oga3.5 Street Types

Oga3.5.1 Collector Road (Figures 8 and 9)

Figure 8: Collector Road Plans: Combined driveways on left and separated driveways to the right.

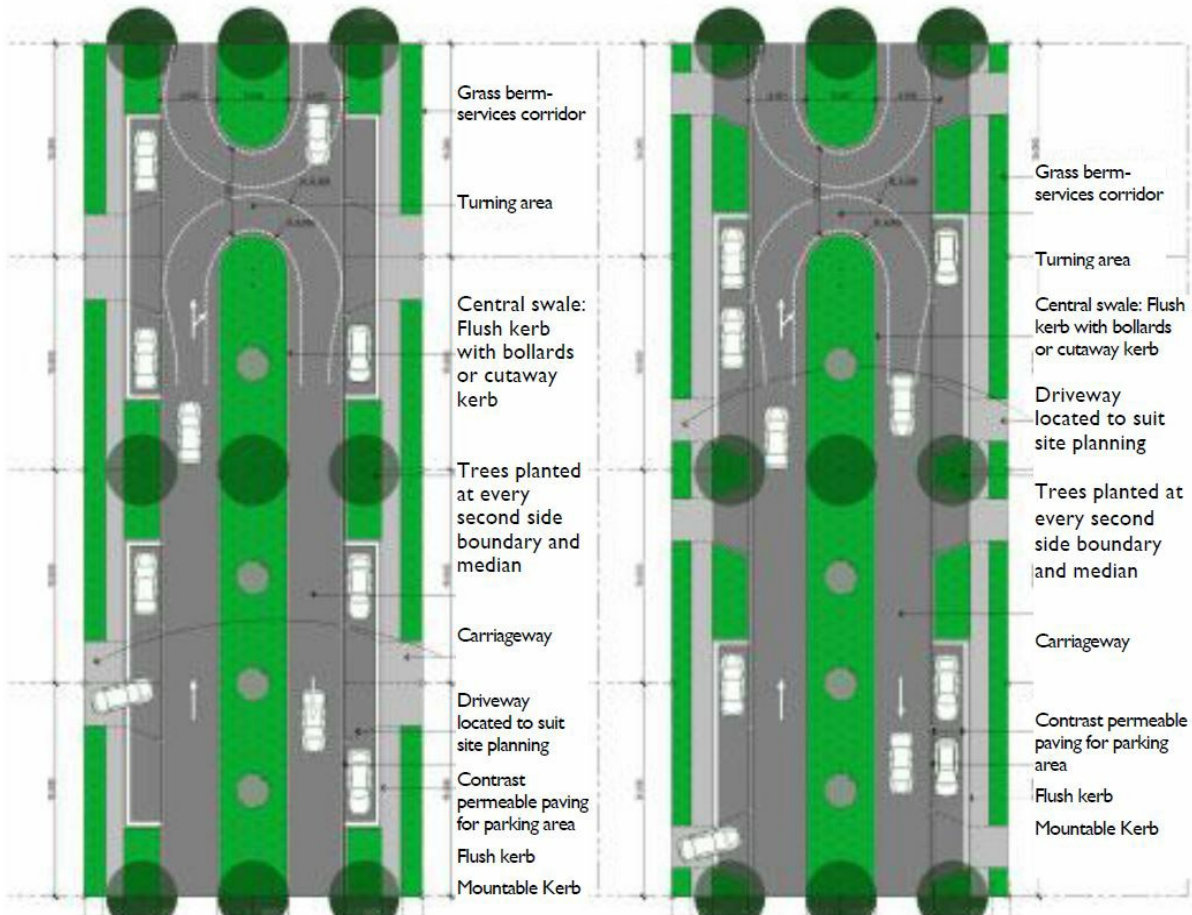


Figure 8: Collector Road Plans: Combined driveways on left and separated driveways to the right.

Waikato District Plan - Waikato Section

- Central swale for low impact stormwater management. Flush kerb to allow water to pass into swale.
- Planting in centre swale.
- Permeable carpark paving that contrasts with asphalt to narrow road visually. Flush kerb at carriageway/parking edge and mountable kerb to footpath edge.
- Tree planting at every second property side boundary in carparking bay depth to narrow road visually.
- Root guard to tree pit.
- Driveway crossing anywhere between trees over mountable kerb. One parking bay for every site. Refer plans above for possible combinations of street trees, driveways, parking and grassed berm. The plans are based on 15 metre wide sections as these are the narrowest allowed and are suggestions. Other layouts that provide the driveways and carparking will be considered.
- 1.5 metre footpath
- 1.35 metre planted side berm for services. Services MUST be located in this berm to allow tree planting in parking bay depth.

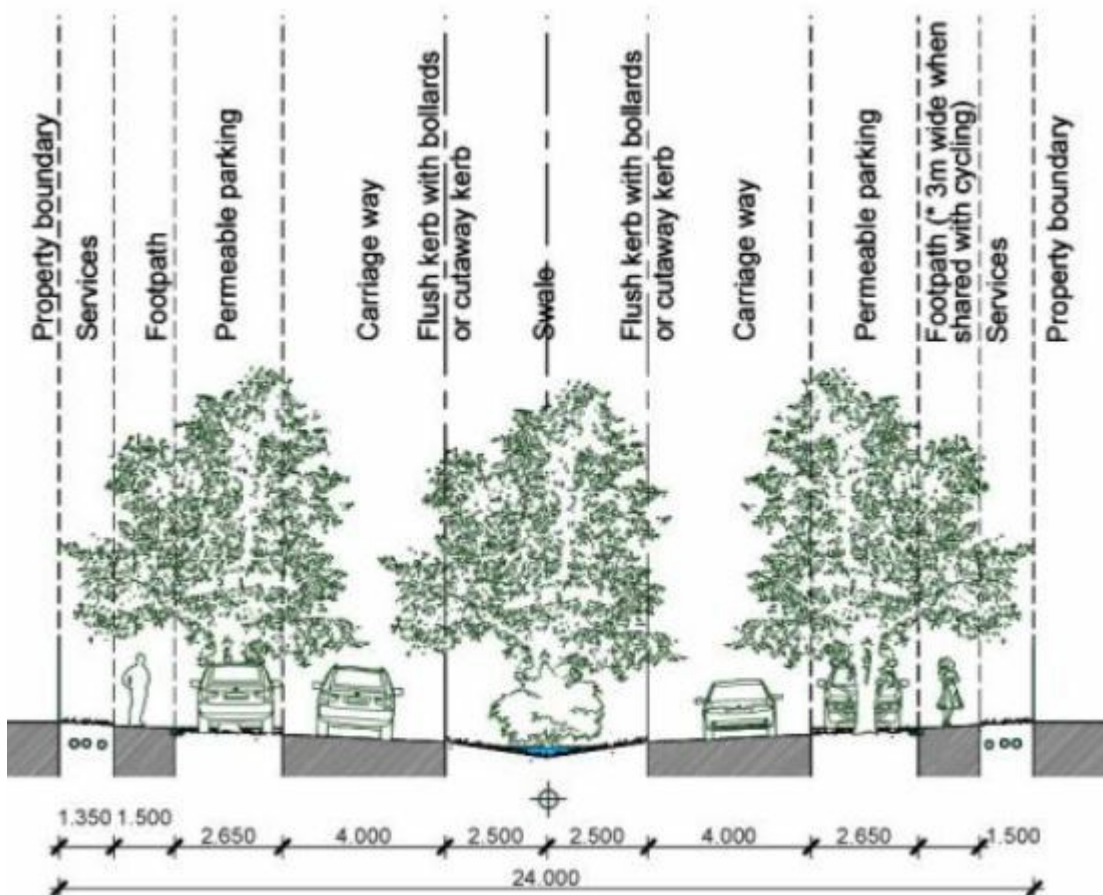


Figure 9: Collector Road cross section.

Oga3.5.2 Local Road (Figures 10 and 11)

There are two options for carriageway width depending on projected traffic volume. Refer to the [Appendix A Engineering Standards Figure 4B3](#) for more detail.

- Permeable carpark paving that contrasts with asphalt to narrow road visually. Flush kerb at

Waikato District Plan - Waikato Section

carriageway/parking edge and cut-away kerb to footpath edge.

- Tree planting at every second property side boundary in carparking bay depth to narrow road visually.
- Root guard to tree pit.
- Driveway crossing anywhere between trees over mountable kerb. One parking bay for every site. Refer attached plan for possible combinations of street trees, driveways, parking and grassed berm.
- 1.5 metre footpath.
- 3.5 metre wide side swale. Refer engineering details for driveway/footpaths crossing the swale. Services **MUST** be located in this berm to allow tree planting in parking bay depth.

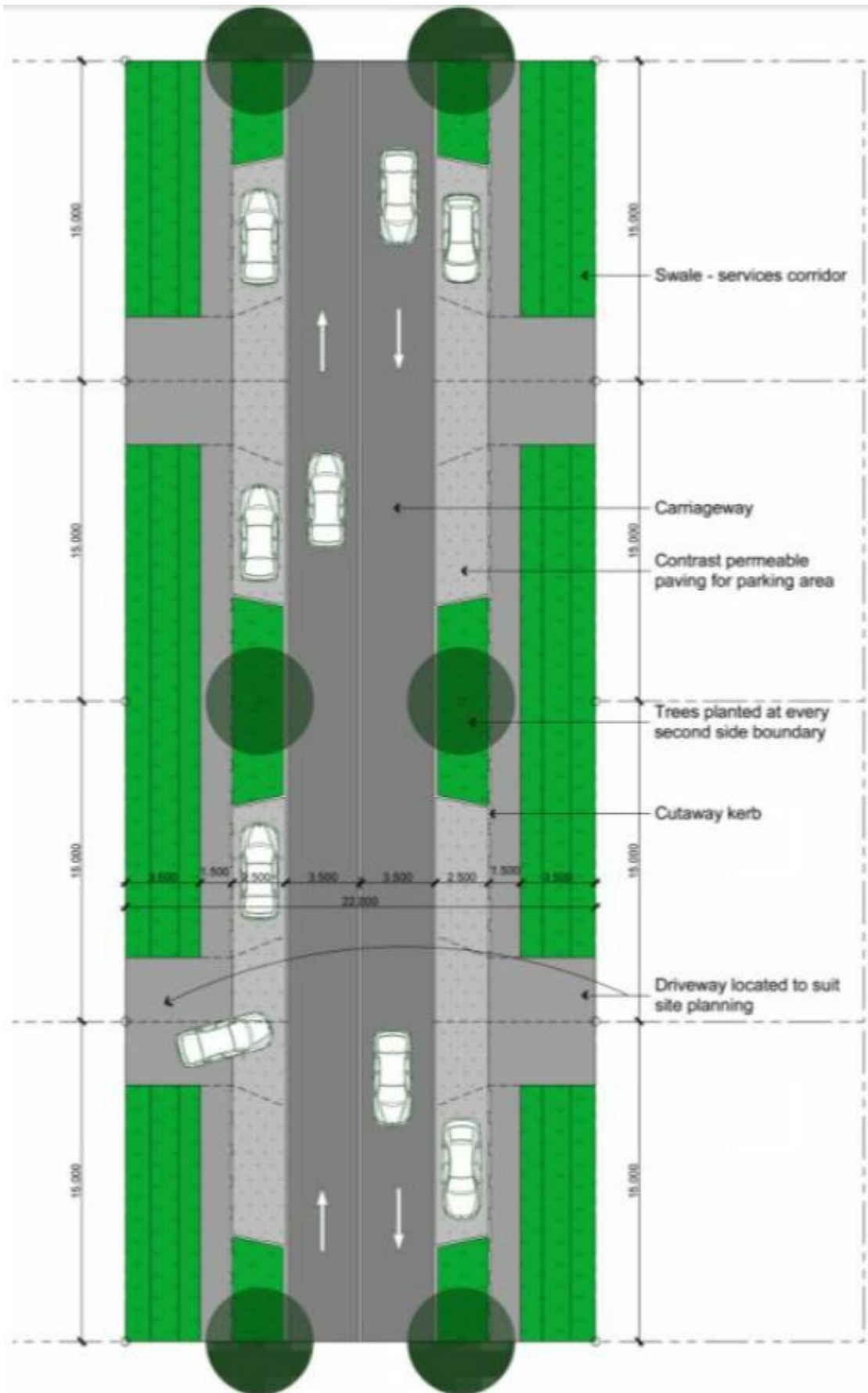


Figure 10: Local Road Swale Option plan

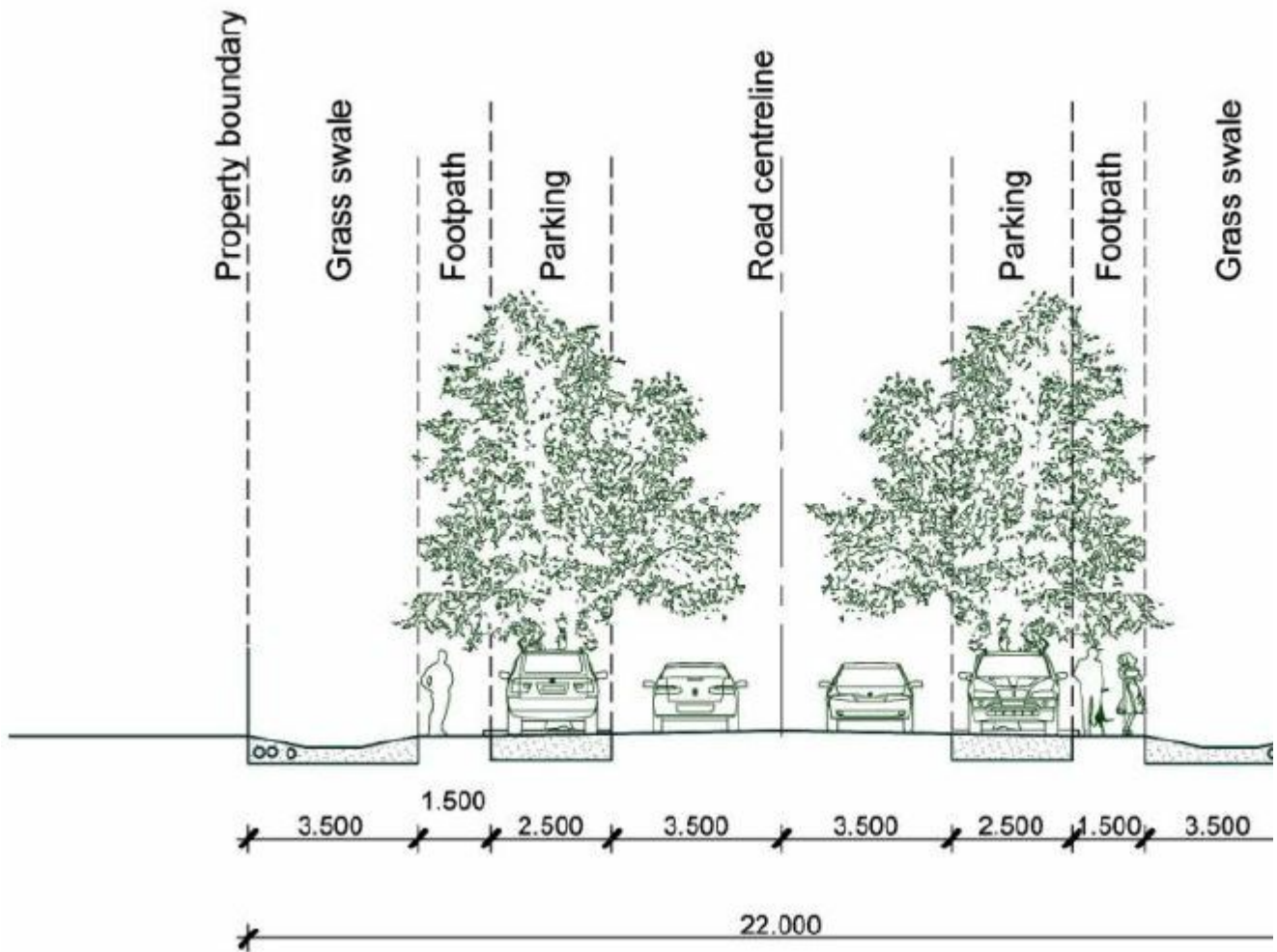


Figure 11: Local Road Swale Option cross section

Oga3.5.3 Stream Margin Local Road (Figures 12-14)

- Local road along stream margins.
- One way carriageway pair split on each side of stream or two-way if street if only possible on one side of stream.
- Permeable carpark paving that contrasts with asphalt to narrow road visually. Flush kerb at carriageway/parking edge and mountable kerb at footpath edge to reduce driveway level transition on house side. Standard kerb on stream margin side.
- Tree planting at every second property side boundary in carparking bay depth to narrow road visually.
- Root guard to tree pit.
- Driveway crossing anywhere between trees over mountable kerb. One parking bay for every site. Refer attached plan for possible combinations of street trees, driveways, parking and grassed berm.
- 1.5 metre footpath on house side of street and 3 metre shared path in stream margin. Path location in stream margin to be confirmed as part of subdivision consent.
- 1.35 metre planted side berm for services on house boundary. Services MUST be located in this berm to allow tree planting in parking bay depth.
- Integrate stormwater ponds into central open space (outside flood plain).

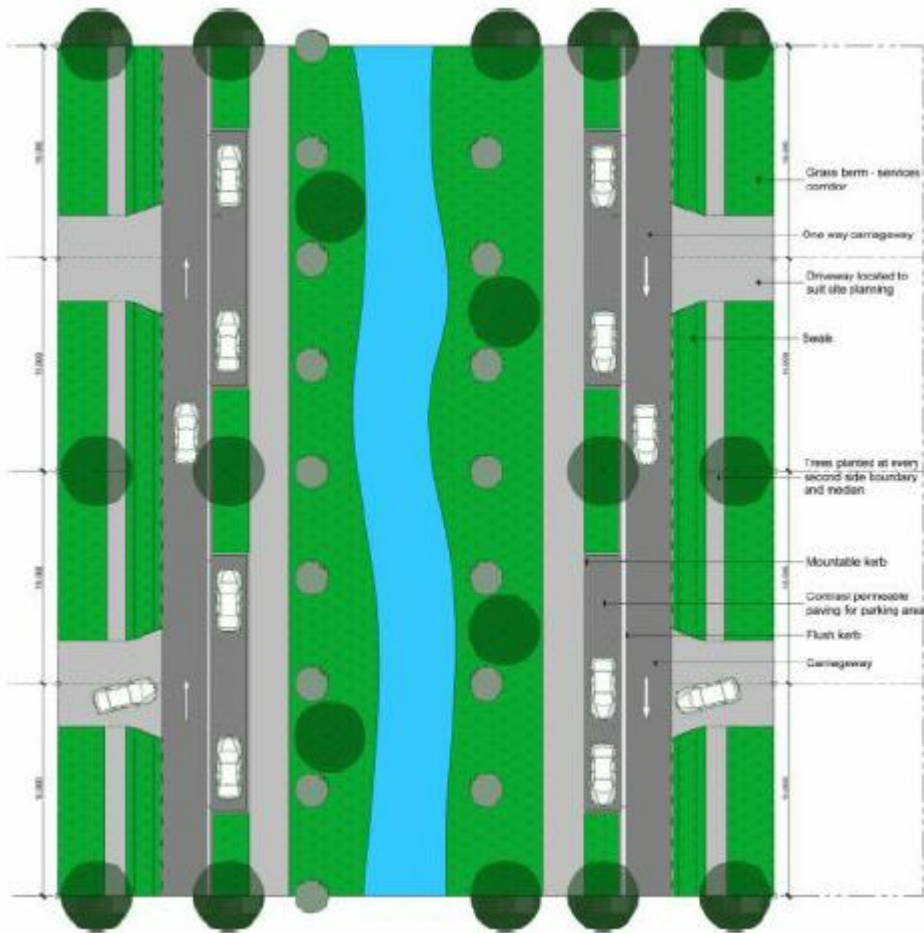


Figure 12: Local Road Swale Option cross section



Figure 13: Possible outcome as an urban park solution. Alternative if more undergrowth required for ecological reasons.

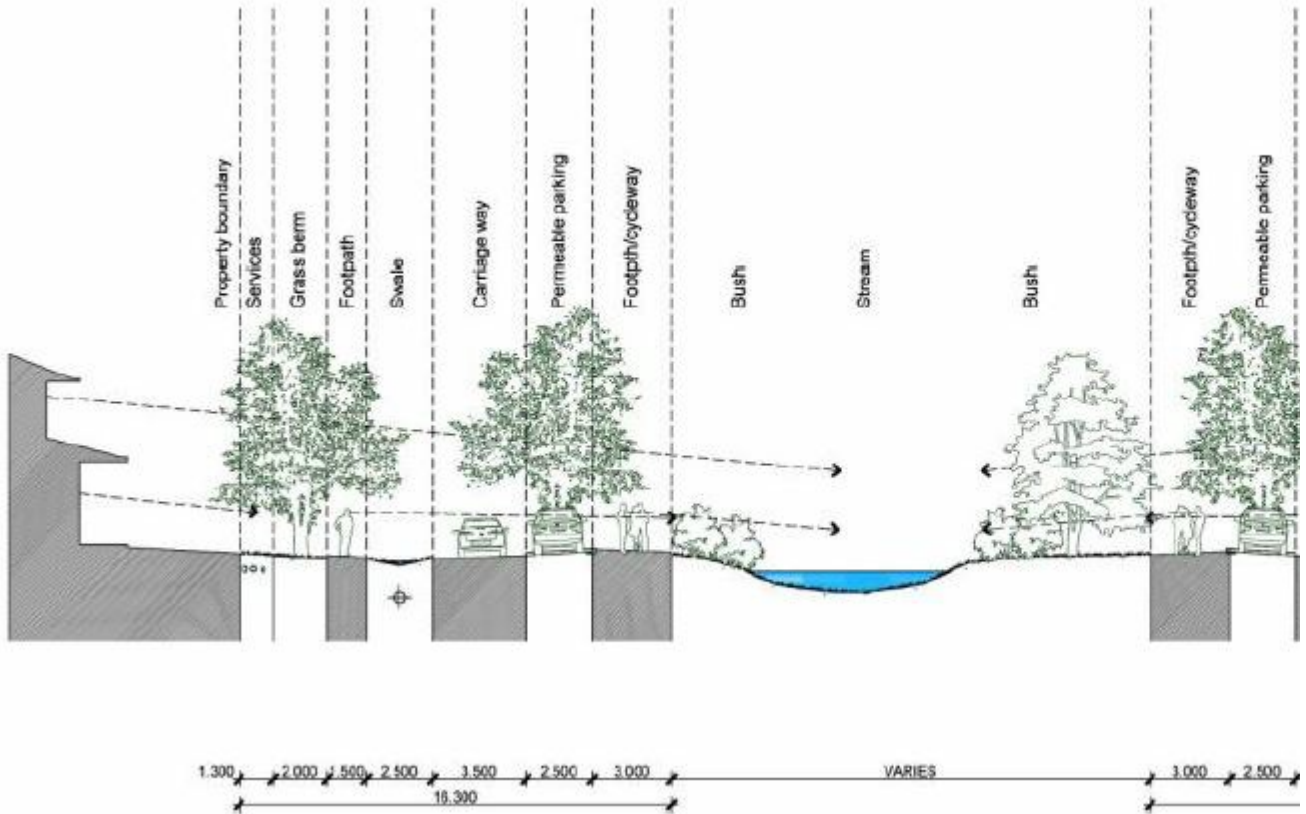


Figure 14: Stream Margin Street cross section

Oga3.5.4 Wetland Edge Local Road (Figures 15 and 16)

- Two way local road carriageway.
- One way lane as option (refer overall examples in residential subdivision section).
- Permeable carpark paving that contrasts with asphalt to narrow road visually. Flush kerb at carriageway/parking edge and mountable kerb at footpath edge to reduce driveway level transition. Standard kerb on wetland side.
- Tree planting at every second property side boundary in carparking bay depth to narrow road visually.
- Root guard to tree pit.
- Driveway crossing anywhere between trees over mountable kerb. One parking bay for every site. Refer attached plan for possible combinations of street trees, driveways, parking and grassed berm.
- 1.5 metre footpath on house side of street and 3 metre shared path in wetland margin. Path location in wetland margin to be confirmed as part of subdivision consent.
- 1.35 metre planted side berm for services on house boundary. Services MUST be located in this berm to allow tree planting in parking bay depth.
- Integrate stormwater ponds into wetland margin open space (outside flood plain).
- Tree planting to suit wetland edge landscape context.
- 3 metre shared path around wetland side of street. 1.5 metre footpath on residential side of street.
- Wetland margin to specific design.

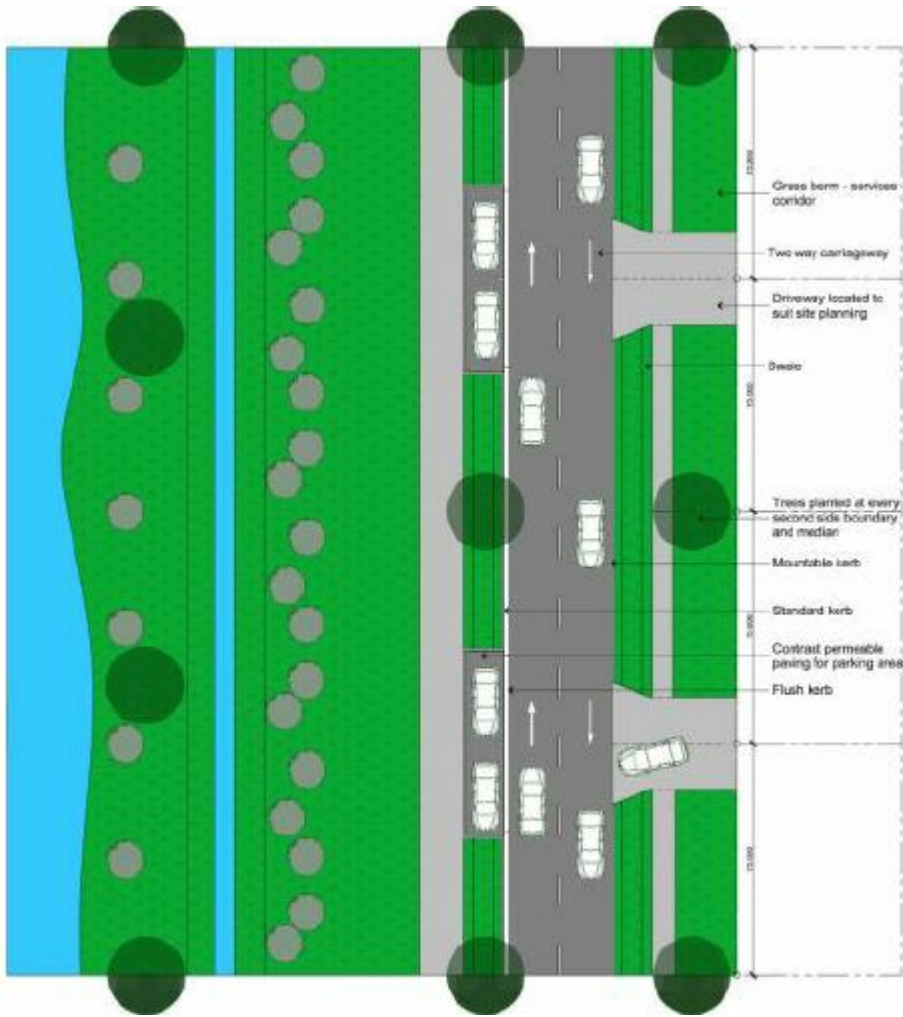


Figure 15: Wetland Edge Road plan

Waikato District Plan - Waikato Section

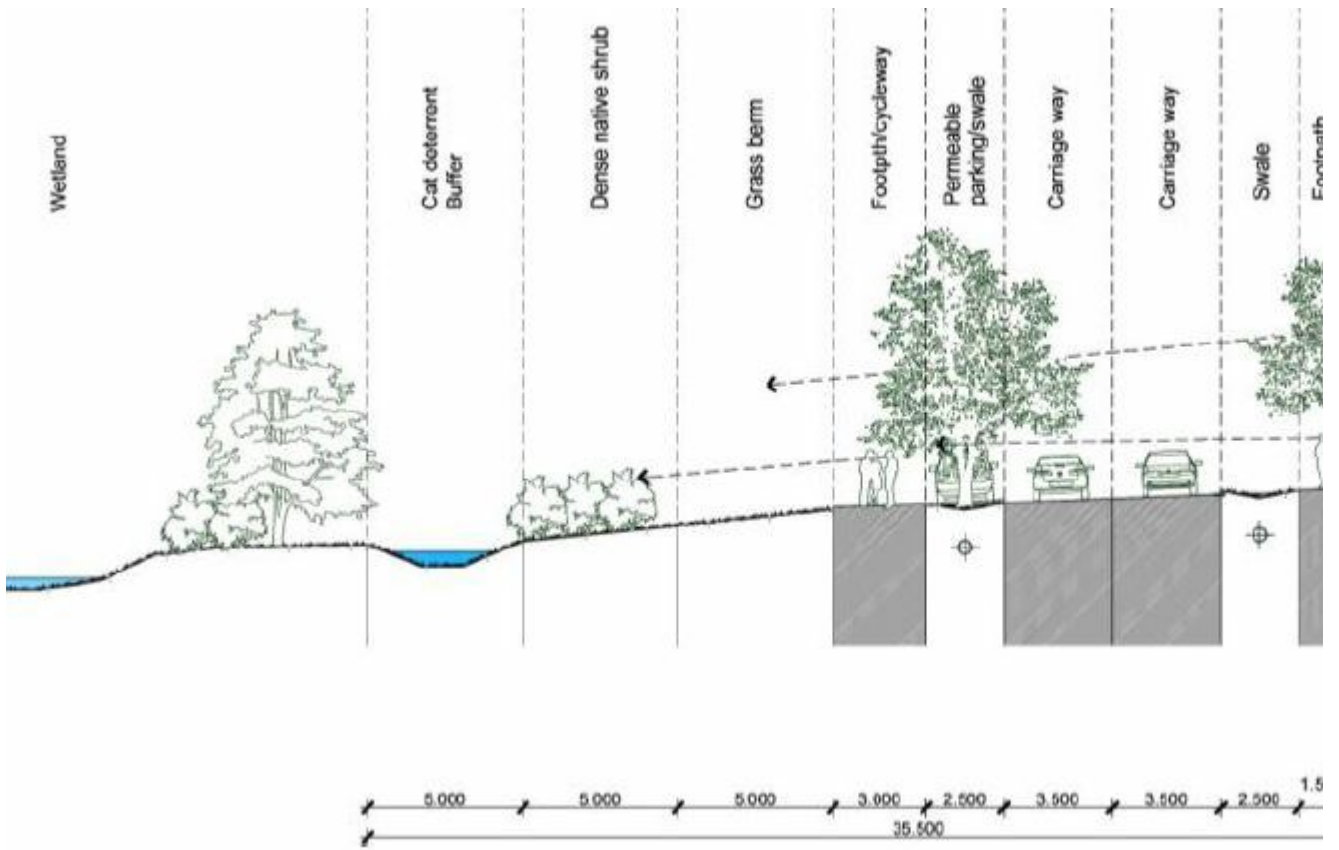


Figure 16: Wetland Edge Road cross section

Oga4 Residential Subdivision

Oga4.1 Block Sizes

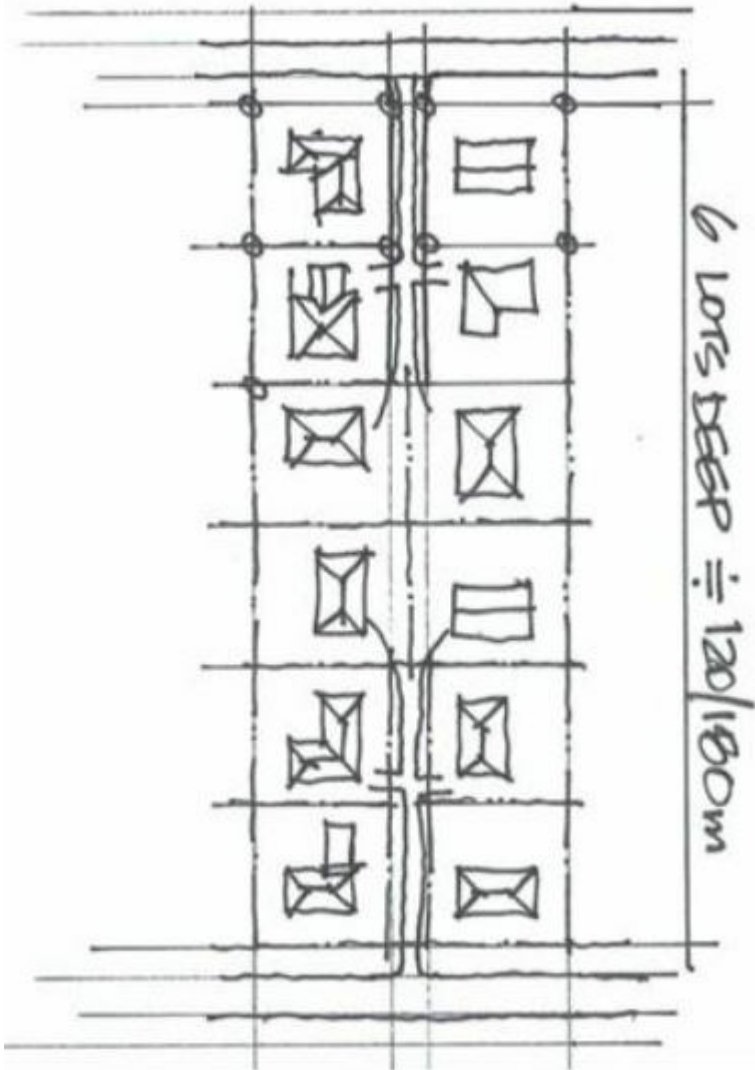


Figure 17: Block plan possible with existing District Plan rules.

The residential block is the middle scale of urban design between town layout and individual site design. The block size should be the result of a connected street network and individual sites that create private outdoor space. Block sizes (allied with street connectivity) should be kept to a reasonable size to encourage walking and cycling in a neighbourhood. In the past, some developers have sought to minimise costs by reducing the number of public streets and increasing the number of rear lots and associated rights of way. Blocks are potentially 6 houses deep and increase substantially in size (Figure 17). The resulting right of way driveway is similar in width to a local road so splits the line of houses along the street and detracts from the streetscape character.

The number of rear lots should be minimised, but they are unavoidable in some locations due to irregular land parcel shapes and steep topography. Short culs-de-sac with good streetscape amenity are a better solution (Figure 18).



Figure 18: Short cul-de-sac for awkward shaped land parcels.

Oga4.2 Block Types

Lot shapes and topography combine to make three main block types: square, rectangular and irregular. The block shapes frame vistas down roads and across intersections and change the open or contained nature of a neighbourhood.

The rectangular block shape with two lots in depth creates a walkable neighbourhood and reduces the number of right-of way driveways (Figure 19). The short end of the block should be placed against collector or arterial roads so more houses are on quieter local roads. Neighbourhood shops

can be placed on the end block with a rear service lane as a buffer to houses. Rear lanes (dashed) can be added for medium density housing if garage doors are likely to dominate the streetscape.

This grid pattern creates an open character for the neighbourhood with a long vista down every street, which can become monotonous.

Offsetting local roads or central village green parks maintains a walkable street pattern but closes the view to create a more contained character (Figure 20). Medium density housing can be located between the neighbourhood shops and village green. The convenience to shops and outlook across the park offset smaller gardens that suit young childless couples or retired people for example.

Irregular blocks (Figure 21) are useful to adapt to rolling ground so earthworks are minimised and the streets generally follow existing contours. The curving streets also close long views that are usually balanced by the views available from the sloping ground across lots.

Square blocks (Figure 22) were commonly used in the 19th century for low-density allotment housing with vegetable gardens or small paddocks. Examples of this block shape can be seen in Ngaruawahia (Figure 23). For today's urban zones square blocks are generally too big or create lots that are too irregular in size. A hollowed out square block is a useful type for medium density housing with a shared private or public open space to offset smaller gardens.

Predominance of one block type creates areas without different character. It is preferable to use the different block types to suit the topography, arterial roads and open/closed neighbourhood character.

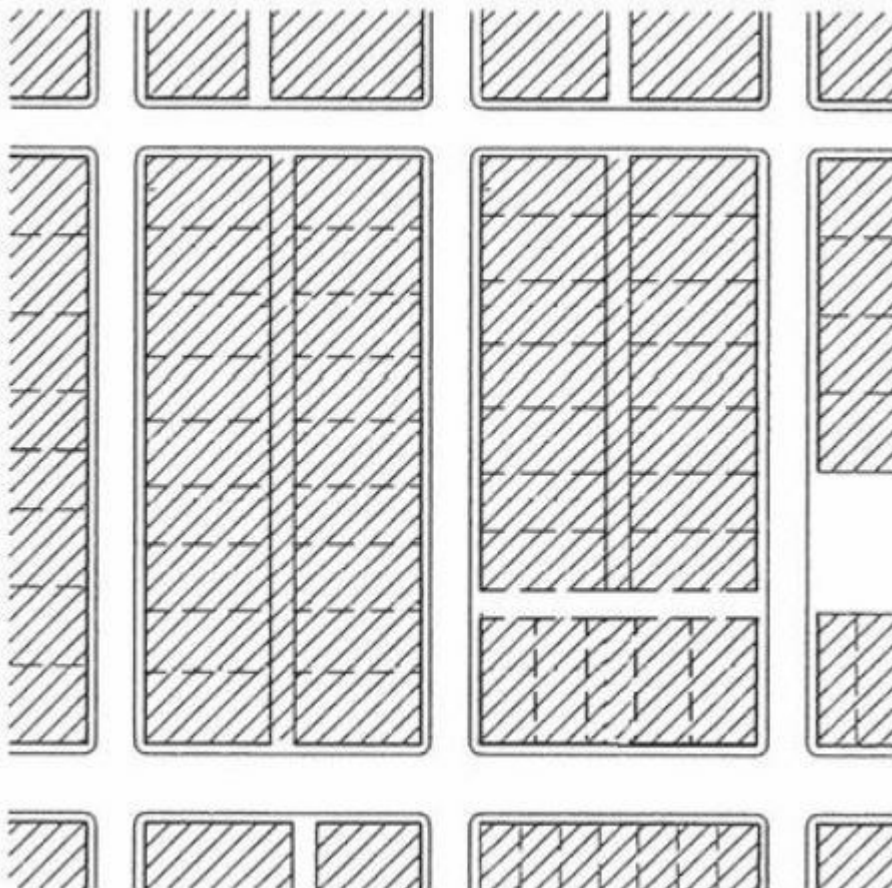


Figure 19: Rectangular Block

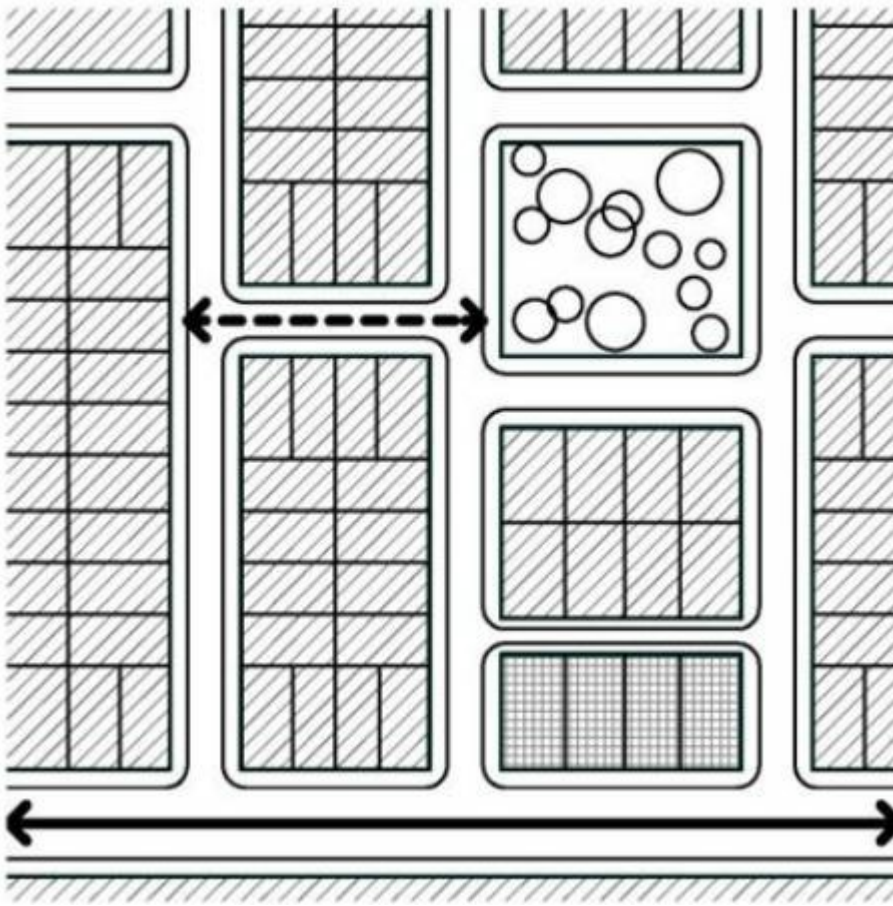


Figure 20: Closed views with offset



Figure 21: Irregular shaped block

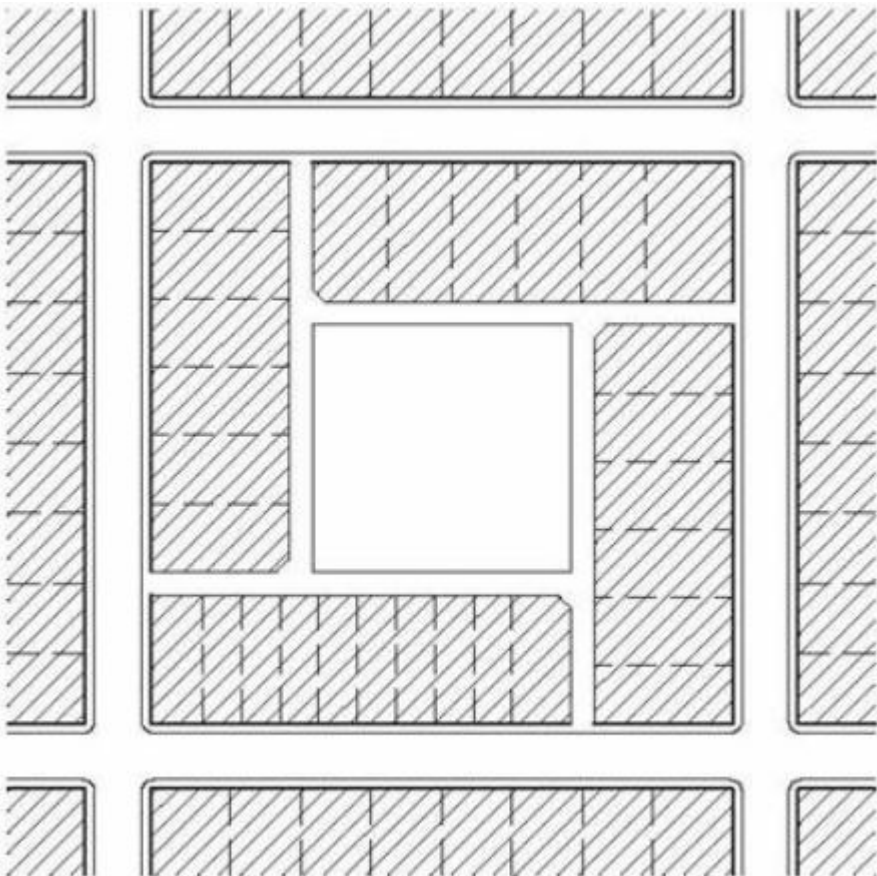


Figure 22: Square Block

Oga4.3 Lot Orientation

Maintaining a village and/or natural character relies on landscaping of private outdoor space. Therefore it is important that lots within the block types are shaped to create sunny outdoor spaces that relate directly to living, dining and kitchen areas. Lot shapes will be assessed at subdivision consent stage against the following guidelines.

Sites with north, east or west facing rear yards should be rectangular rather than square to maximise the private rear yard.

Sites with east or west facing rear yards can be wider and shallower to allow for north sun into the house itself. Subdivision plans should minimize sites with north facing front yards as the sunny side of the house is open to the street. North/South streets are better than East/West streets as they reduce the number of houses with a north facing front yard (Figure 24). The sites with north facing front yards can be designed out as shown in Figure 25.



Figure 23: Square blocks in Ngaruawahia

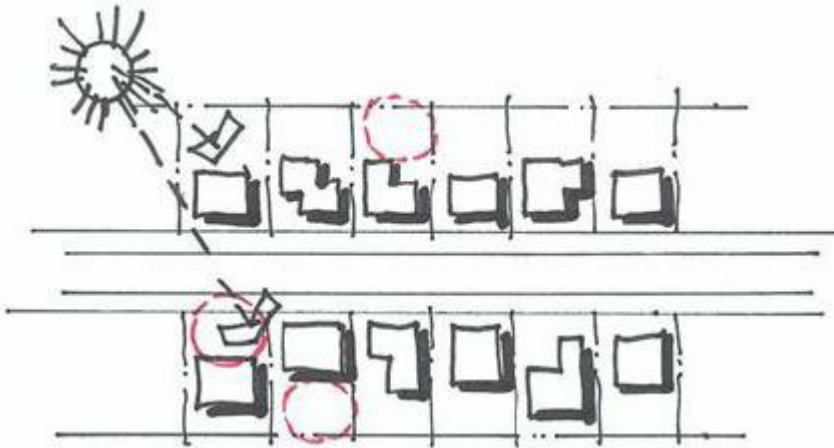


Figure 24: East-West street and difficult South rear yards

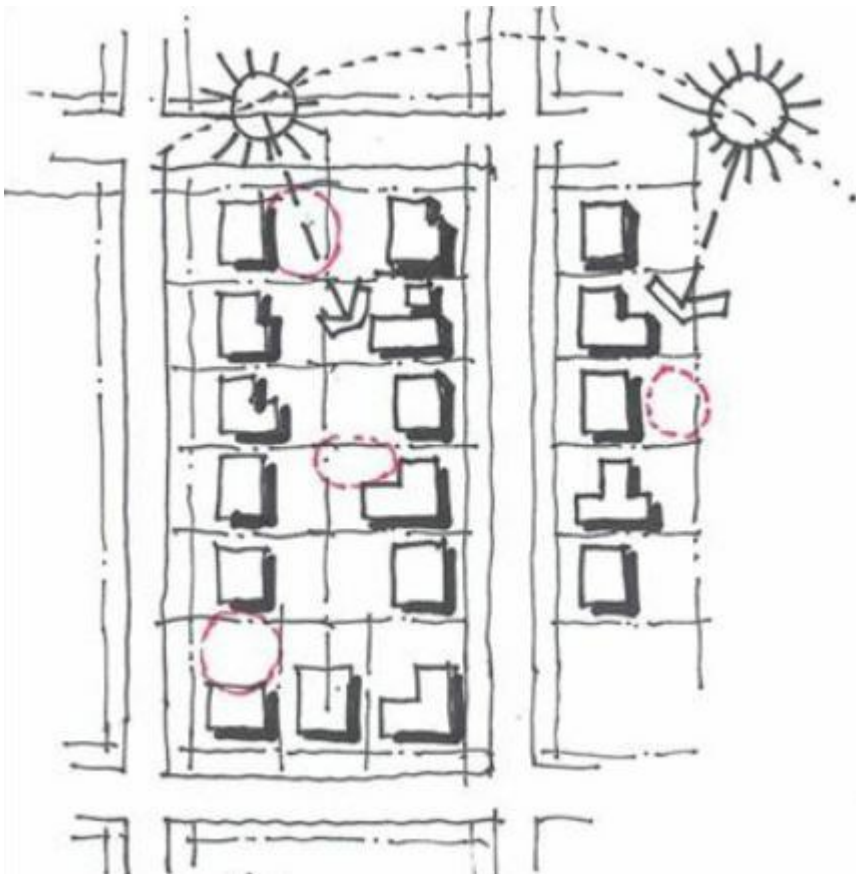


Figure 25: North-South street and East or West rear yards

Figure 26 shows 450m² sites with a 15 metre frontage as these are the minimum dimensions in the District Plan. They also assume a typical single level 156m² house. Two storey houses can ease private open space concerns but they are more expensive.

Figure 26 (top left) shows that a good size north facing rear yard is possible even on a 450m² site. Figure 26 (top right) is the minimum 600m² new residential zone site. This site can be wider for better sunlight at the sides and space between houses, but generally deeper sites are better with north facing rear yards.

Similarly private rear yards are possible with east or west facing rear yards. Figure 26 (middle) is a 450m² site, and Figure 26 (lower) is the wider 600m² site that allows more north sun into the house itself.



Figure 26: Lot orientation north, east and west rear yards

A square section loses many of the benefits of the north facing rear yard (Figure 27, top) as the house and driveway occupy the full depth of the site. The outdoor living space is on the side of the section and so is not private from the road.

The square section is a better solution with a north facing front yard (Figure 27, bottom.) The open space is on the side of the section and receives sunlight but fencing will be required for privacy. A

north-facing site that relies on sunlight passing over the house to an outdoor living area in the rear yard has to be deeper so a larger section is required.

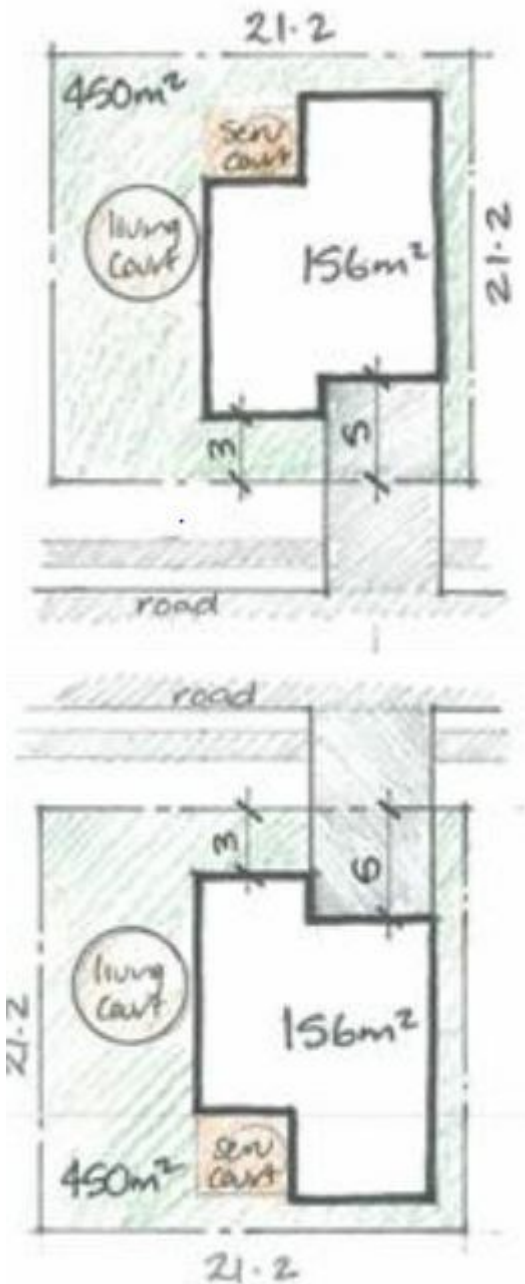


Figure 27: Square shaped 450m² lots

Oga4.4 Site Planning

Good site planning of detached houses achieves a balance between quality public domains and private backyards in which to live.

Figure 28 shows how 6 metre front yard set-backs derived from low-density rules are frequently misapplied to smaller lots, severely compromising space in the backyards and privacy. Large setbacks and sweeping front lawns can create the illusion of a grander house, but at the expense of a decent sized backyard if the lot size is too small. Street presentation is important to development,

but should not be the determining factor in site layout. The size of the front yard should not compromise a liveable backyard size.



Figure 28: 6 metre front yards and no rear yard

Oga4.5 Building Fronts and Front Yards

Houses should have a public front with windows and entries so that they contribute to interesting streets that encourage walking and cycling. 'Eyes on the street' also encourages walking and cycling by creating streets with public surveillance.

Onsite vehicle manoeuvring has been a standard requirement for residential sites. Even though the front yard requirement is only 3 metres, standard house plans are generally rectangular in shape so the whole house is pushed back. This can mean a large front yard, with the consequence being the rear yard is reduced in size. Unless the section is large, the private open space is severely reduced for traffic safety reasons (Figure 29.) High quality outdoor living space is an important part creating attractive urban amenity, and this typically means having a substantial part of the outdoor space on the side or rear of the section. Therefore onsite manoeuvring is not required for lots on residential roads where low traffic volumes and speeds mean that traffic safety will not be compromised by traffic reversing onto a street.

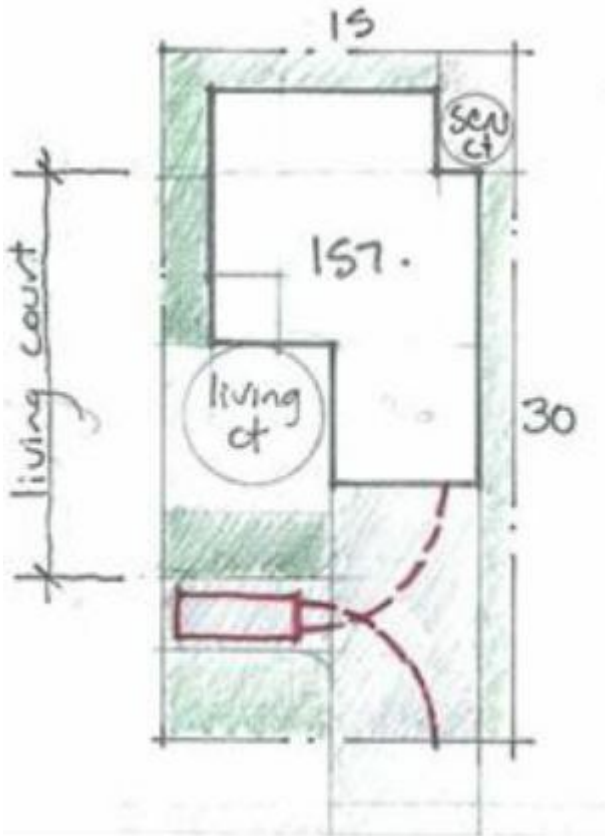


Figure 29: Effect of vehicle manoeuvring on small sites

Garage doors can become visually dominating and adversely affect streetscape amenity (Figure 30). If the garage door has to face the street it should be placed 6 metres into the site allowing for on-site parking. The main section of the house can project forward with the minimum front yard of 3 metres and reduce the visual effect of the garage.

If streets run along the contours on sloping sites then retaining walls should be located on rear boundaries.



Figure 30: Recessed garage doors (bottom)

Minimising retaining walls in the front yard improves the streetscape. Berms or sloping landscaped areas are preferable in front yards (Figure 31 and 32).

On steeper slopes cutting building platforms to most of the section area results in very high retaining walls. Reduced building platforms and two storey housing is encouraged to limit the size of retaining walls (Figure 33).



Figure 31: Retaining walls detract from streetscapes

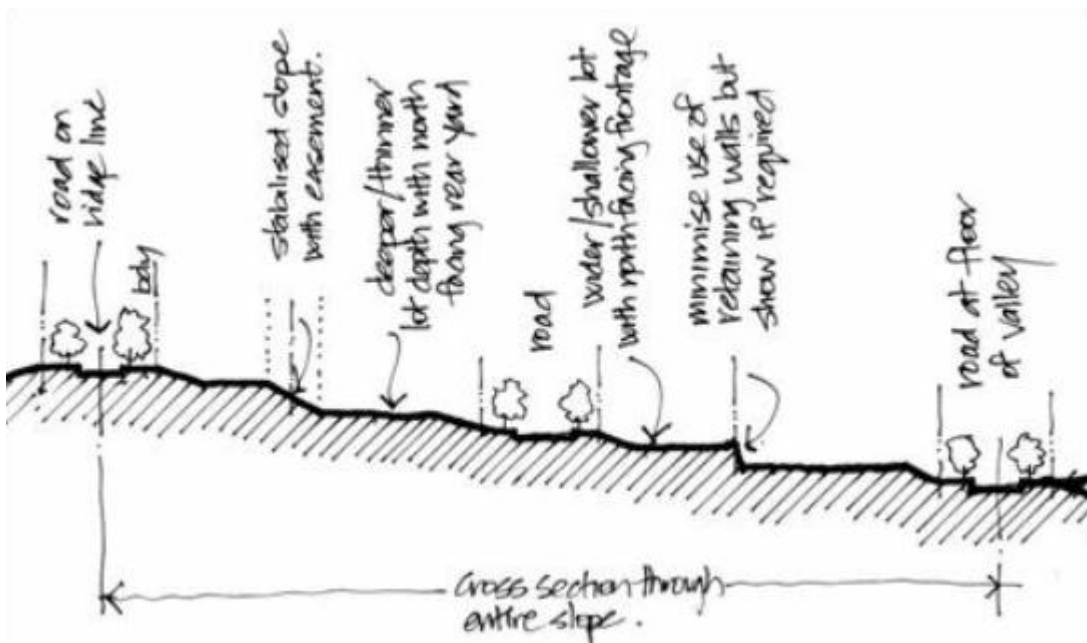


Figure 32: Berms in front yards and retaining walls in rear yards

Earthworks designed to provide area of usable quality on dwelling sites while retaining much of the original slope profile can be relatively cost effective to achieve, and still create attractive lots.

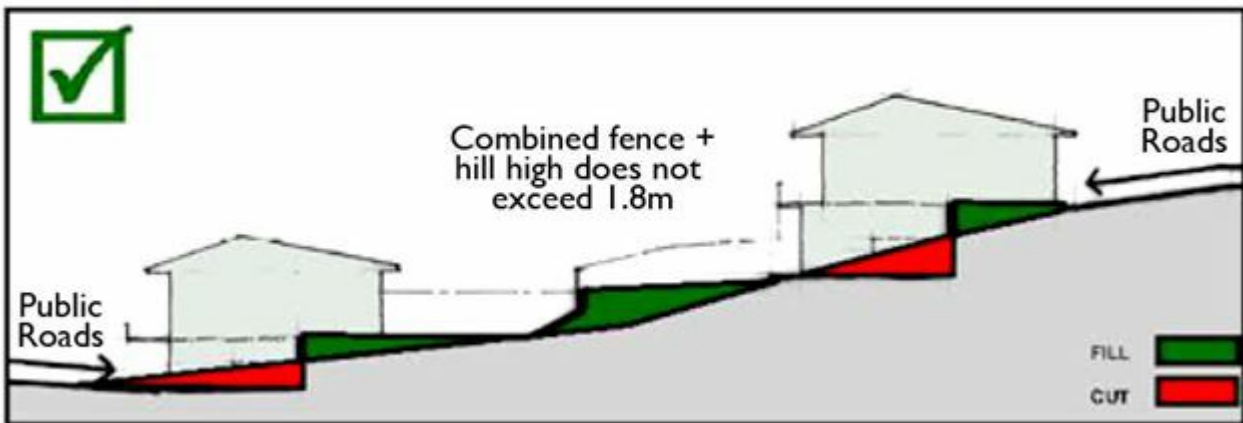


Figure 33: Cutting and filling sites to minimise earthworks on steeper slopes

Oga4.6 Design Variety

Housing companies frequently buy a number of sites in subdivisions and use standard designs. A repetitive design creates a monotonous streetscape. No more than three houses in a row having the same plan and finishes avoids this problem.

Oga4.7 Residential Subdivision Key Points

- Keep blocks to a reasonable (easily walked) size.
- Mix block types to suit topography, views and avoid repetitive neighbourhoods.
- Minimise the number of rear lots.
- Maximise the number of north-south streets and sections with north, east or west facing rear yards.
- Consider lot orientation, size and shape to ensure each house has a sunny outdoor living area in the rear yard associated with living areas.
- Design houses to have 'eyes on the street.'
- Avoid garages dominating the streetscape.
- Avoid repetition of standard house plans next to each other.

Oga5 Overall Examples

The following two sketches illustrate all the above design issues combined into a single subdivision. Figure 34 shows common solutions that do not comply with the Guideline. Figure 35 shows an alternative design including guideline recommendations. These examples are reproduced with permission from Kapiti Coast District Council.

KEY DESIGN ELEMENTS

Average lot of size – 600sqm

1. Existing roading condition precludes direct vehicle access to individual lots, internal access from Right of Ways results in properties 'backing' onto the main road, which will likely result in solid fencing creating a poor interface.
2. Lack of any sense of 'street' or frontage for many lots
3. Many lots accessed solely by minimum width ROW – no pedestrian connections to street for residents or visitors.
4. Lots 'back' onto reserves, which will likely result in solid fencing creating a poor interface.
5. Poorly integrated open space to main road, solid fencing likely.
6. Heavily engineered stormwater pond
7. Entrance point from Main Road located poorly in relation to road curve and sightlines.
8. Lack of future connections for adjacent sites.

No measures beyond Council-imposed conditions put forward to lock in future quality.

KEY DESIGN ELEMENTS

Average lot of size – 550sqm; does not materially affect the 600sqm average size target market for this 'product'.

Waikato District Plan - Waikato Section

1. Worked with the Council to improve road interface and allow access to the Main Road. Good frontage now possible at this critical interface.
2. Clear demarcation of fronts and backs for all lots providing a sense of 'street frontage'
3. Limited use of right of ways and cul-de-sacs to maximise site penetration for lots.
4. Reserves have a clear sense of frontage and surveillance.
5. Open space is integrated with main road through shared use of public lane giving width and surveillance for pedestrians.
6. Stormwater pond designed around existing contours to reduce earthworks.
7. Entrance point from main Road moved away from road curve to improve sightlines.
8. Future connections for adjacent sites provided to boundary.

Measures put forward to lock in future quality:

Covenants over fence height and dwelling interface (garage recessed behind dwelling; glazing from a living room fronting the street; clearly legible front doors) to maximise sense of frontage and public realm interface.

'Spot' covenants on key sites ensuring main glazing provides surveillance over potential conflict areas (S).



Figure 34



Figure 35: Subdivision design options for same site using principles from Guideline. Courtesy of Kapiti Coast District Council.

Oga6 Assessment Criteria

Natural Environment

- Is the general appearance of the existing topography maintained?
- Are natural landmarks such as ridges, valleys or knolls used to maintain character and differentiate one neighbourhood from another?
- Do the blue and green corridors help to link and create natural habitat for wildlife species?
- Do permanent streams have a riparian margin with public streets included along the perimeter? Refer Stream Margin Street.
- Are significant natural character elements and open space bounded with a public street around at least 50% of the perimeter?
- Are at least 75% of constructed wetland or stormwater detention ponds bound by a waterway or public open space?
- Is the constructed wetland or detention pond adequately integrated with the green corridor and/or public open space with appropriate landscape treatment?

Street Network

- Do proposed streets comply with the street typology with emphasis on street trees and shared paths on the walking/cycling route?
- Is a 20 metre wide street reserve included where adjacent land is capable of being divided into 4 or more allotments or where there is another road to connect to?
- Are culs-de-sac limited to a maximum length of 100 metres and no more than 20% of streets in each subdivision consent?

Residential Subdivision

- Do rear lots make up less than 5% of total lots and have separate accesses?
- Does any front lot have accesses to other properties on both side boundaries?
- Do block shapes and street alignment respond to topography?
- Do lots will result unnecessarily in back fences facing collector or arterial roads?
- Are pedestrian-only walkways that connect streets minimized and overlooked by lanes and fronts of houses?
- Does the subdivision plan and section shapes maximise north-south streets and sections with north, east or west facing rear yards?
- Is the private outdoor living court on the northern side of the building platform in the rear or side yard?
- Is each section shape deep or wide enough, or is the building platform positioned, to allow sunlight penetration into the private open space in the rear yard or side yard for a section with a north facing front yard?
- Are retaining walls located along the rear and side boundaries and minimized in height with berms?

Building Consent

- Are garage doors recessed behind the fronts of other parts of the house so that they do not dominate the streetscape?
- Does the house entry and windows adequately overlook the street?
- Do more than three detached houses in a row use essentially the same plan, building shape and materials?

Town Centre

- Is the building built to the front yard and have an active frontage?
- In the absence of specific zoning is a large format retail development located to complement the town centre? Locations inside or on the edge of the centre itself are preferred.
- Is the front of the large format retail development designed as a street and connects through the carpark to the existing streets?
- Does the building design complement the existing streetscape through similar proportions, percentage of openings and materials?
- Do buildings contribute to townscape on key sites such as corners, around public squares and open spaces?
- Does the development reflect the stated intentions for the town centre?

Oga7 Te Kauwhata Environment

The overall urban design objective for the Structure Plan is to ensure Te Kauwhata grows in a

manner that retains and enhances its village character, and thereby creates an enjoyable living environment. Urban design should integrate the natural environment into the public realm as a feature in the town's layout to reinforce and enhance character. In Te Kauwhata this includes the gently rolling landform, Lake Waikare, the Whangamarino Wetland and the streams that flow into them. This approach is being used to improve Te Kauwhata's connections with Lake Waikare and Whangamarino Wetlands and to provide good walking/cycling streets between these areas.

All subdivisions in the Te Kauwhata Structure Plan area must take account of the Te Kauwhata Natural Character Plan (Figure 36) to ensure that key natural features are preserved and integrated into the town layout.

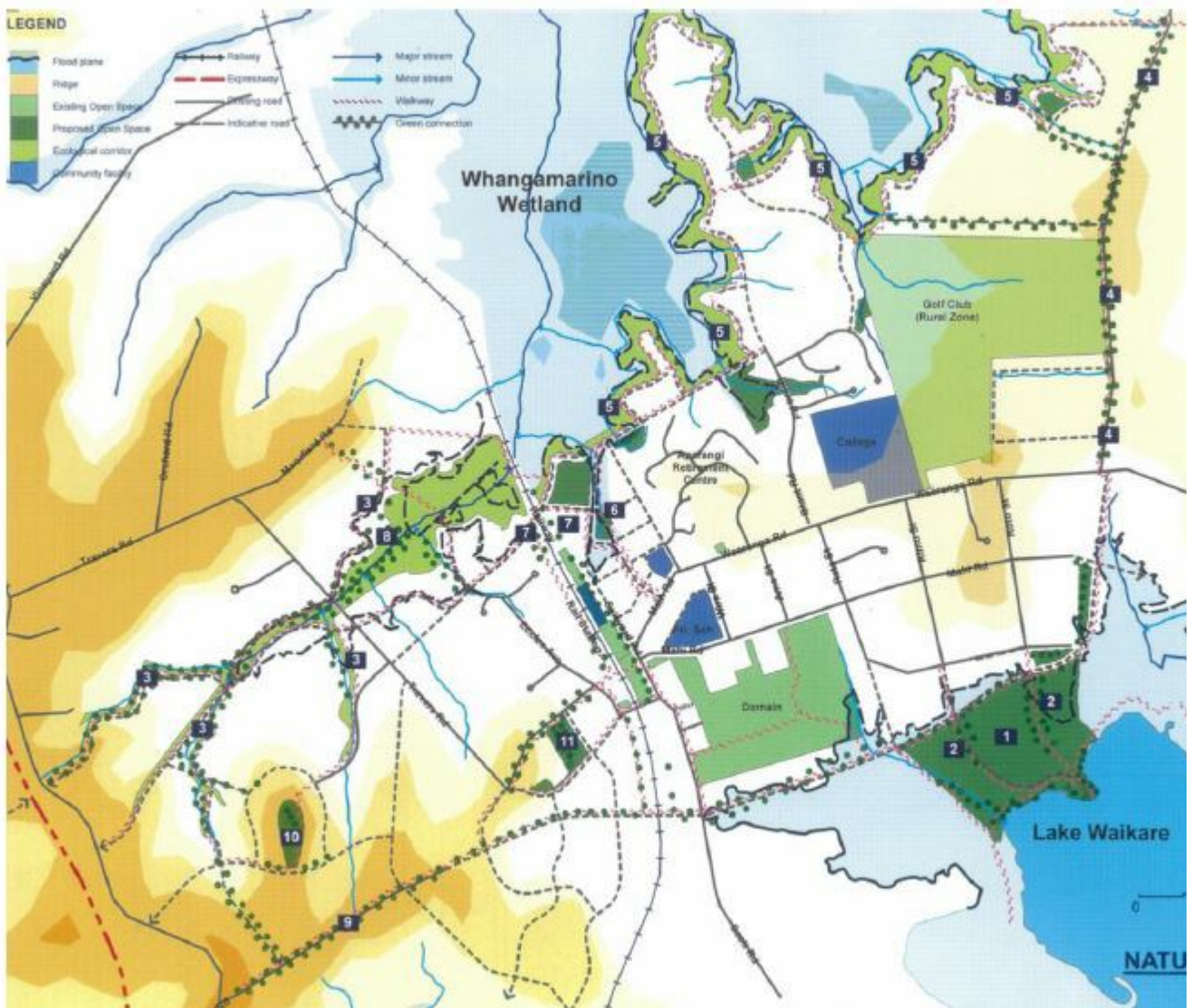


Figure 36: Natural Character Plan

Oga7.1 Lake Waikare

Access to Lake Waikare should be enhanced by walkway or road extensions from existing streets and through the bypass development. This sets the framework for intersection design and landscape elements in the bypass design, lake foreshore enhancement and landscaping projects to be included in Council's LTP.

Oga7.2 Whangamarino Wetland

The Environmental Protection Policy Area applies to the wetland margin. It requires ecological enhancement works to be undertaken and a walkway / cycleway to be developed within the policy area when the property is subdivided. Stormwater management may be integrated into these enhancement works. The Structure Plan requires an edge street along the Whangamarino Wetland margin adjacent to the policy area. Details of the street cross-section including the shared walkway / cycleway in the policy area are provided in the street types. The street may have to move back from the wetland edge where topography or overland flow paths dictate. This layout will ensure houses look over the walkway / cycleway, which will enhance safety.

On the eastern side of the Blunt Road peninsula an indicative open space reserve is included within the policy area. The exact location is to be determined through the subdivision process. Public open space should also be provided in the new residential area to the north of the golf course.

Oga7.3 Travers Road

The Structure Plan proposes ecologically enhancing the existing stream and creating an associated public reserve from upstream of Travers Road to the Whangamarino Wetland. The stream and the reserve will provide significant open space amenity between the Living and Country Living Zones, as well as providing for recreation, stormwater management and ecology. Upstream of Travers Road, the reserve boundary will correspond with the main flood plain ponding area, and roads will be located on both the northern and southern reserve boundaries to make the reserve highly visible and highly accessible. Downstream of Travers Road, a road is to be built on the northern boundary of the reserve, which also corresponds with the flood plain boundary. The southern parts of the flood plain will remain in private ownership.

Oga7.4 Te Kauwhata Road Gateway

Tree planting and a shared path improve the main entry route visually and form part of the ecological walkway.

Oga7.5 Hilltop Reserve

This proposed reserve keeps the highest point of the Travers/Wayside block as a green feature and preserves natural character in what will become an urbanised area. The reserve is envisaged as a neighbourhood passive open space approximately 1.25 hectares in area with views of the wetland, town centre and Lake Waikare.

Oga7.6 Ecological Walkway

The red dashed line shows the street and walkway network that creates a recreational circuit around the town. It links Lake Waikare, Swan Road lookout, Whangamarino Wetland, Town Centre, Moorfield Pond, Travers Road Stream, proposed Hilltop Reserve, Rongopai and Te Kauwhata Domain. The street types include a 'Greenway Street' for this route which includes a requirement for 3 metre shared cycleway/walkway and substantial tree planting.

Oga7.7 Town Centre

The main street of Te Kauwhata slopes gently to the southwest, terminating at the Village Green and railway line. Most of the older buildings are built to the street boundary but some of the newer buildings are set back with landscaped and parking areas located in front. The main street is very wide, does not have any large trees and some sites are vacant. The culmination of all these factors is a main street with very little spatial definition and a loss of character. A planted centre median similar to Bow Street in Raglan is proposed to improve pedestrian safety, slow traffic, add character and serve to contain the street space (Figure 37). Some development will involve 'filling' the empty main street sites.

The relationship of the town centre, railway and Waikato Expressway to each other is fortunate to support future growth. The railway and potential station lie at one end of the main street so future rail passenger services can support the town centre. The Waikato Expressway passes along the western edge of Te Kauwhata so provides good vehicle accessibility but does not sever the town centre. In the future walking and cycling to the town centre and rail station will become more important for Te Kauwhata. Walkway connections to the town centre and railway station are an important design component.

Development will also occur in the Mixed Use Policy Area, which provides for both commercial and residential development between the Main Road and Whangamarino Wetland. Refer to [Section 23A](#) of the district plan for a concept plan. An indicative road structure is proposed to link the new area and Main Road. Council will also endeavour to formalize service lanes behind businesses on both sides of Main Road.

Commercial and work/live businesses are to be located immediately beside the town centre and railway. The future park and ride is assumed to be located in the land alongside the railway station site. Medium density (terraced) housing is to be located away from the noise of the railway on higher ground with views.

Active street frontages are promoted within the Business Zone. These typically include shops built up to the road edge with 75% window frontage and with service vehicle access from the rear, continuous building facades, numerous building entries, retail and commercial uses predominating on the ground floor, and commercial and residential uses on the upper floors overlooking the street. Developments that involve blank walls along the street, on-street service doors, multiple driveways across the footpath, or high fences along the street do not create active street frontages. Long frontages should be broken into shorter sections to reflect neighbouring lot widths using changes in materials; negative vertical joins or steps in the building line at upper levels.

Council is interested in locating some open space and recreational facilities at the northern end of the Mixed Use Policy Area. The Whangamarino flood plain passes through the middle of the policy area. It is to be developed and enhanced as a landscaped open space area that incorporates stormwater management and public access.

Waikato District Plan - Waikato Section



Figure 37: Existing view of Main Road (top) with proposed changes (bottom)