Part 2 | Waimeha Design Guide

Revision 6_ May 2018

Ngarara Master Plan - Waimeha Design Guide

Project no: 2016 - 010
Revision: 6
Date: May 2018
Client name: Maypole Environmental Limited
Author: Dave Compton-Moen

Waimeha Urban Limited

Revision	Date	Description	By	Review	Approved
0	October 2014	Document for client review	DCM / JM / MH	MH / BO	CM
1	December 2014	Final version for consent	DCM	MH/PT	HP
2	March 2015	Update to remove potential lookout at Taewapirau, update of text page 37 and 42	JM	MH	MH
3	November 2016	Update following Architect/Planner Review	DCM	CH	CM
4	January 2017	Updating of plans/ images to reflect changes	DCM	CH	CM
5	November 2017	Adjustment of yard boundaries for Residential 'A' and updating Street tree species	DCM	CH	CM
6	May 2018	Refinement of Stages 2 and 3, and insertion of D7 - Fencing	DCM	TD	CM

Contents

Part 2 Waimeha Design Guide

Summary of Changes as part of Revision 6

Summary of Changes in Revision 6

CHANGES

PAGE NO.	ITEM
P6	Number of lots for Residential A increased to 75, Residential B decreased to 41 lots, Residential C decreased to 28 lots.
P7	Updated images to reflect Stages 2 and 3. Includes the additional Residential A area and community Garden.
P14	Image updated to reflect Stages 2 and 3. Section updated to reflect relationship between street and wetland.
P15	Updated diagram to reflect Stages 2 and 3. Hilltop and community garden callouts added.
P16	Diagram updated to reflect Stages 2 and 3.
P18	Text ammended to remove first sentence, and to add in community garden.
P21	Text ammeneded replaceing lime wih aggregate.
P25	Diagram updated to reflect Stages 2 and 3. Text and labels updated from Ngara Link Road to Te Ara Kawakahia. Crossections updated to match street types.
P26	Diagram updated to reflect Stages 2 and 3. Text and labels updated from Ngara Link Road to Te Ara Kawakahia.
P27	Labels updated from Ngara Link Road to Te Ara Kawakahia. 21.4m changed to 'Varies'.
P29	Labels updated from Ngara Link Road to Te Ara Kawakahia. Grass swale amended to Planted Swale. A3 renamed to A2
P30	Removed.
P31	Labels updated from Ngara Link Road to Te Ara Kawakahia. Crossection A3 added to reflect Stage 3.
P28	Cross-Section A4 Added to reflect Stage 3.
P32	Street width corrected to 15m. Parking bay label adjusted to match distance.
P33	Grass swale dimension extended to 4.4m
P37	Diagram updated to reflect Stages 2 and 3. Residential A - 300m2 amended to 200m2. Residential C - 650m2 amended to 600m2
P50	D& - Fencing options inserted to provide guidance for future residents about the style and placement of fencing permitted within Waimeha

[PAGE INTENTIONALLY BLANK]

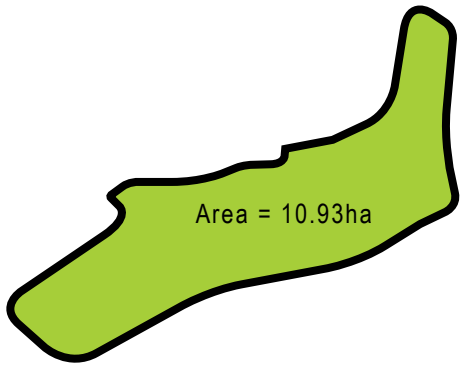
Section A | Create a compact development

A1 | Waimeha Vision

Waimeha is a small-sized local centre that offers a range of services and facilities. It is the southern gateway to the development and provides an interface to the existing Waikanae settlement and to all of the development blocks on the farm and interfaces with the existing Waikanae Town.

The key components of the Waimeha neighbourhood include:

a. At the entrance to the Waimeha is a small-scale retail and commercial opportunity. Taewapirau frames the gateway providing a natural and culturally significant entrance statement and sense of place.
b. A range of residential built forms are provided along the dunes, down to the Ngarara link road (NLR), linked by a strong series of open space connections and a central greenway to knit the first village together.
c. A higher density residential neighbourhood is located at the centre around the hilltop village, which includes terraces, apartments and generous public parks, reserves, shared courts and a system of intimate neighbourhood streets.
d. The hilltop village providing for Waimeha and the rest of the Ngarara Neighbourhoods sits in the hill overlooking the wetland and sea.
e. A community park and playing field is provided with the development of the Linear Park. This provides a range of local public open space opportunities including shared spaces overlooked by properties.
f. Kawakahia Wetland public reserve that is overlooked by higher residential development.
g. A school and potential preschool is able to be provided, which provides a local educational amenity within Waimeha and also servicing wider neighbourhoods.



Landuse type / topology	Total Area (m²)	Average lot Size	Number of lots
Open Space	22,468	n/a	n/a
Apartment	8,450	100	120
Mixed Use/community	10,089	200	40
Residential A	12,125	300	75
Residential B	21,774	400	41
Residential C	18,053	600	28
TOTAL number of lots			**311**

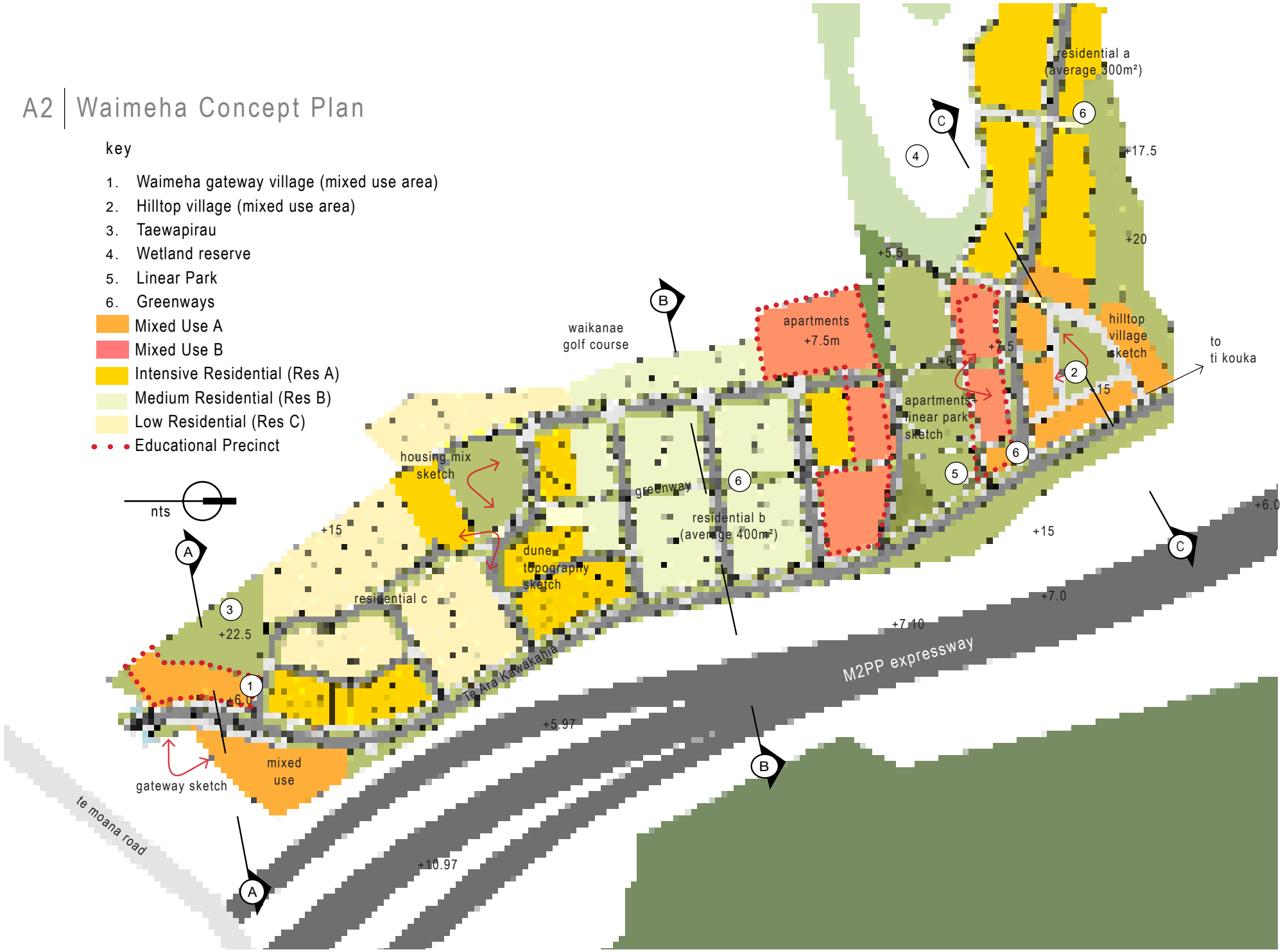
Table A1: Proposed landuse design for Waimeha

A2 | Waimeha Concept Plan

key

1. Waimeha gateway village (mixed use area)
2. Hilltop village (mixed use area)
3. Taewapirau
4. Wetland reserve
5. Linear Park
6. Greenways

Mixed Use A
Mixed Use B
Intensive Residential (Res A)
Medium Residential (Res B)
Low Residential (Res C)
Educational Precinct



A3 | Overview sketches - Looking southwest over Waimeha showing lot layout

Built form


te moana road
taewapirau
(+22.5m)
residential c
(average 650m²)
residential a/b and public open space
residential c
(average 600m²)
residential a housing and flat open space
(average 300m²)
residential b
(average 400m²)
apartments
greenway
residential c
(average 600m²)
gateway village
(mixed use)
expressway
approx 40m
Te Ara Kawakahia
11m WIDE GAS EASEMENT
linear park
residential b
(average 400m²)
up to Hilltop Village, Ti kouka,
Totara Dunes and Homestead

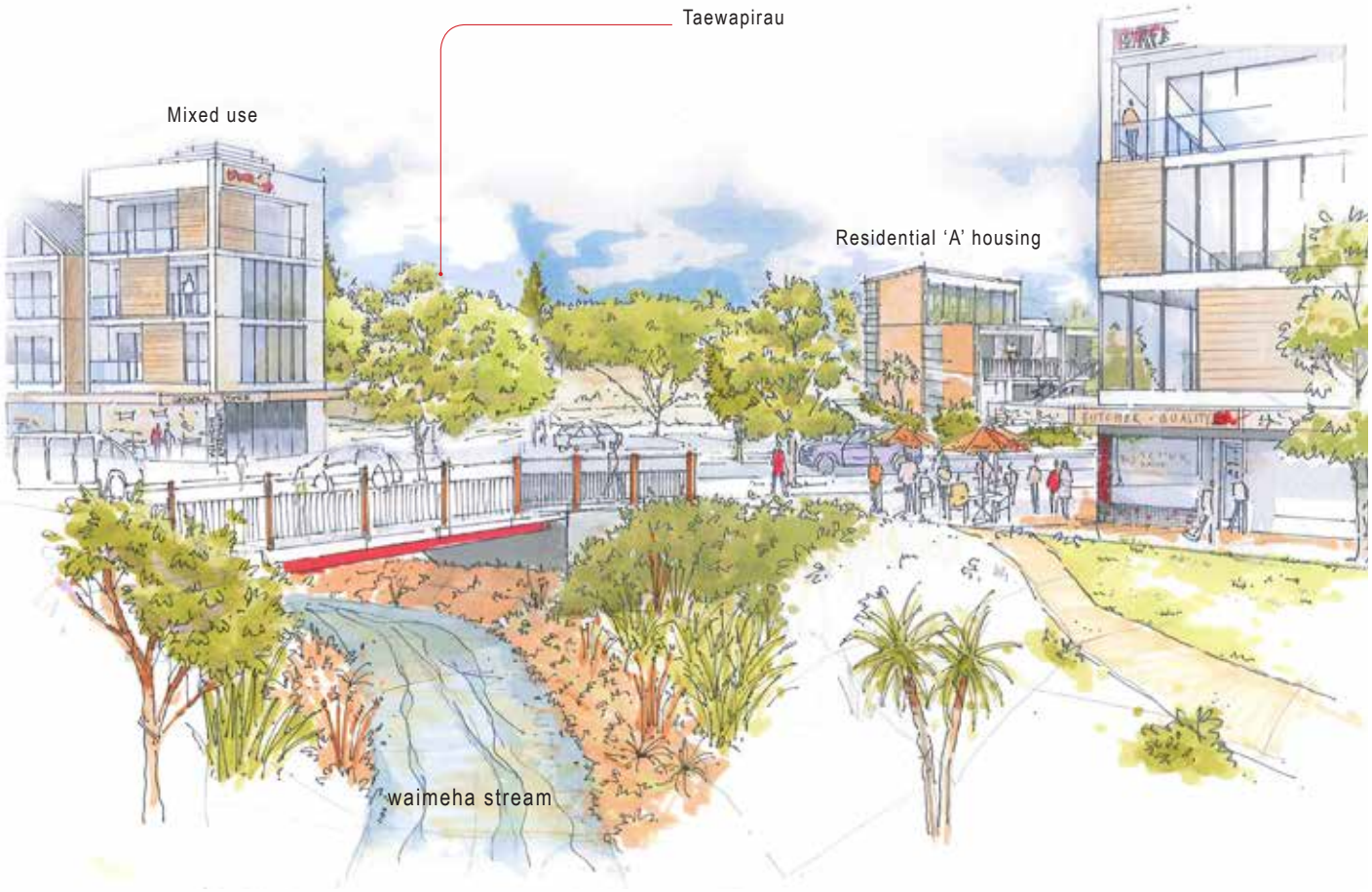
A4 | Gateway to Waimeha

The creation of a ‘gateway’ entrance into the Waimeha neighbourhood is a key design element to achieve a compact development footprint and to create a visual entrance statement.

The sketch is drawn from above Te Moana Road crossing over the Waimeha Stream. The main collector road passes through the middle of two small mixed use zones which will provide for the first stages of development. It is anticipated some of the units will be used for residential purposes before there is demand for retail or commercial uses. Buildings will be designed so there is flexibility to change and adapt uses over time.

The mixed area will be at approximately +6masl, with Taewapirau in the background of the sketch being approximately +22.5masl. Te Moana Road is approximately 3.5masl and the proposed top of the expressway interchange is approximately 11.0masl.

The section below shows an approximate cross section of the proposed elevations resulting from the M2PP expressway and Waimeha neighbourhood.



Section A - A

A5 | Hilltop Village

A key component of the Waimeha design is the establishment of a hilltop village located on the high ground which runs between Waimeha and Ti Kouka.

This sketch shows a proposed hilltop village with expansive views available to the coast and to Kapiti Island. A central village green is surrounded by a mix of mixed use buildings and apartments to create an active edge to the square.

Section C - C

Section B | Natural Edges, Open Space and Wetlands

B1 | Wetland response

The development of the road and housing has taken account of the extent of the wetland. A minimum 20m buffer has been provided at this location and a 50m open space buffer has been provided to private dwellings. Within the open space area is:

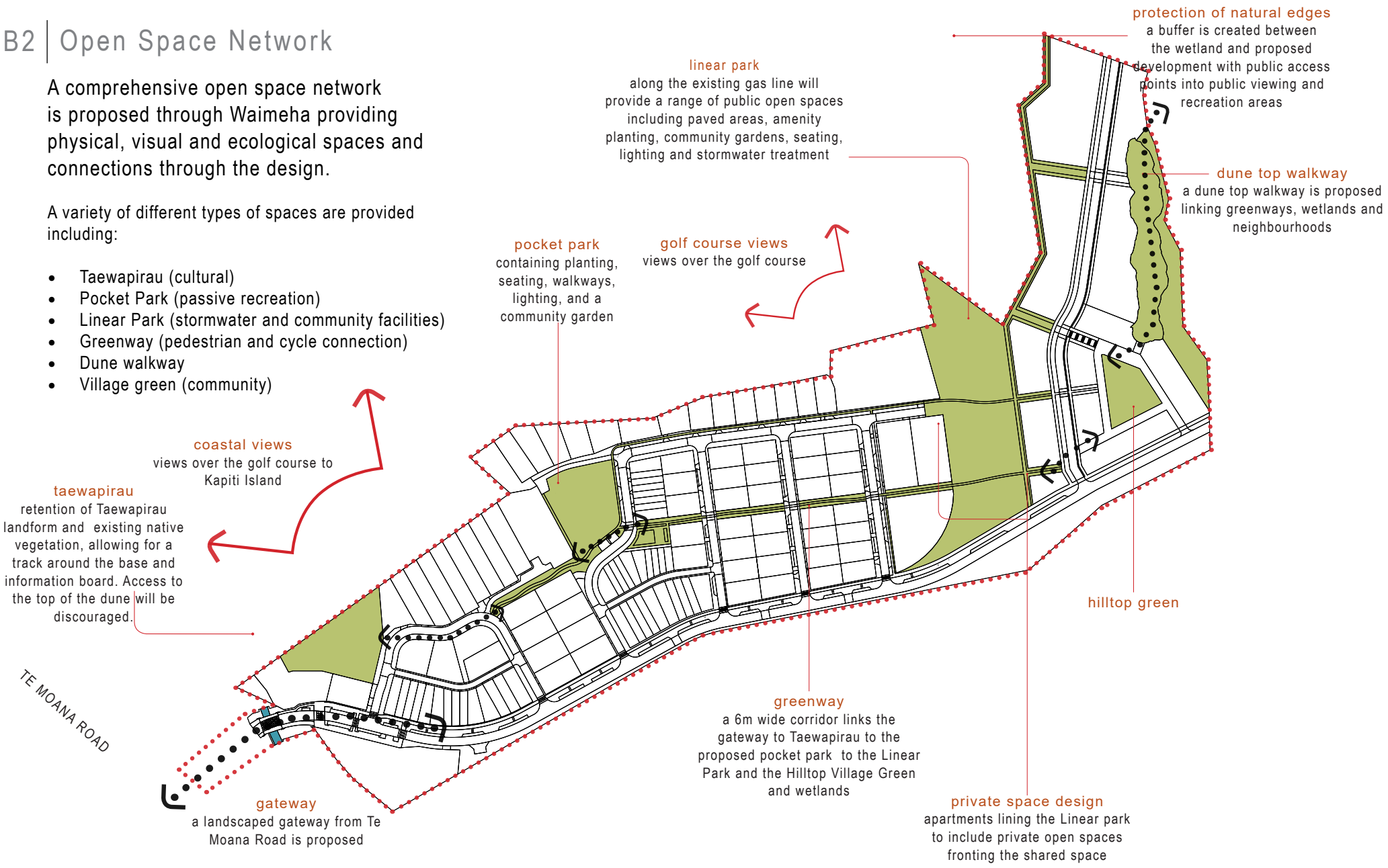
- a transition of existing mahoe scrub that is regenerating in the wetland
- the collector road will be reduced to allow for more native planting and less road neighbouring the covenant
- people will be able to experience the wetland as they bike and walk alongside this slow moving movement corridor
- walkways may be able to be provided along the northwest of the wetland as people go towards the beach
- stormwater will discharge away from the wetland towards the linear park.

B2 | Open Space Network

A comprehensive open space network is proposed through Waimeha providing physical, visual and ecological spaces and connections through the design.

A variety of different types of spaces are provided including:

- Taewapirau (cultural)
- Pocket Park (passive recreation)
- Linear Park (stormwater and community facilities)
- Greenway (pedestrian and cycle connection)
- Dune walkway
- Village green (community)



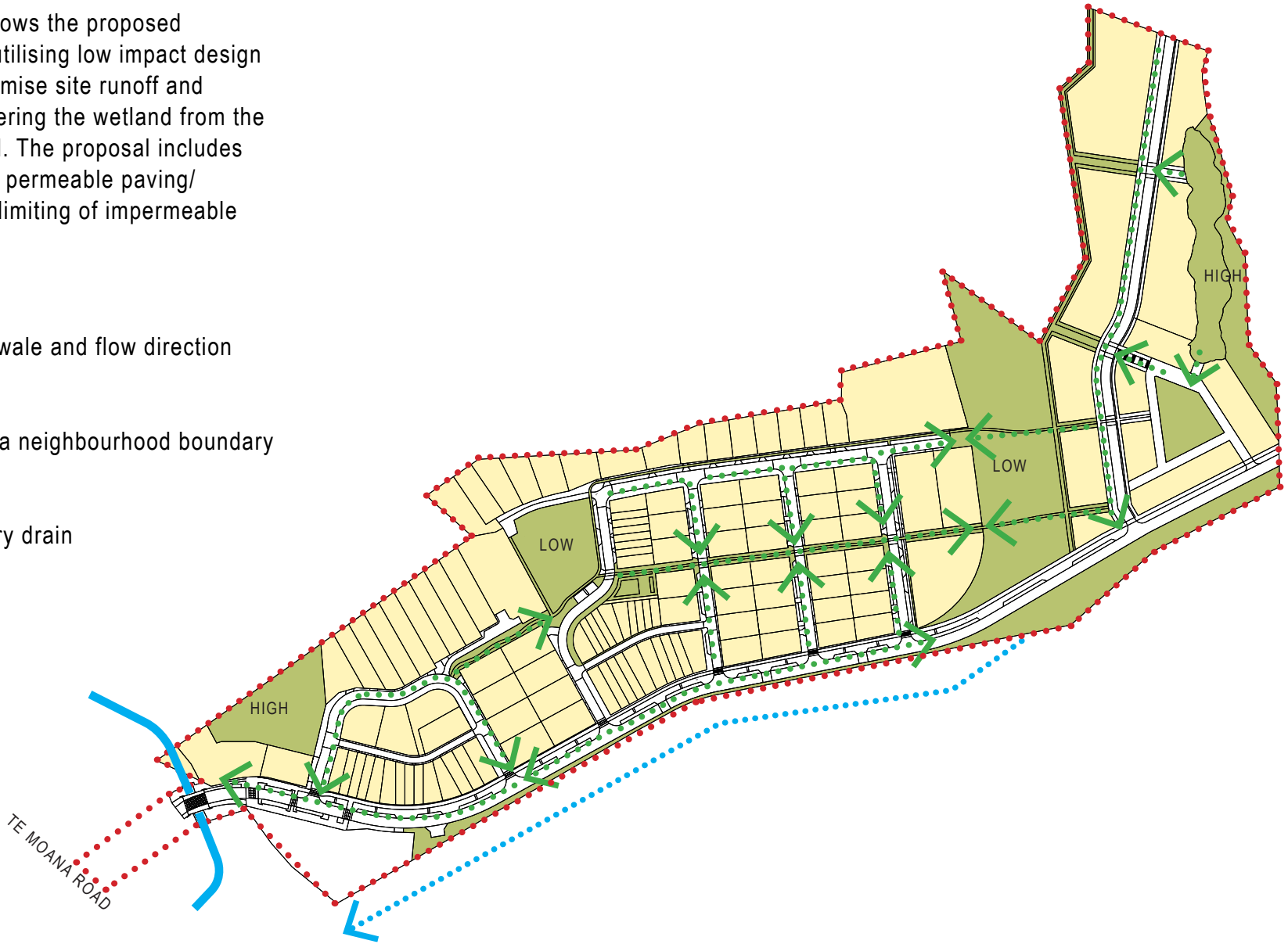
B3 | Stormwater Plan

The plan below shows the proposed stormwater plan, utilising low impact design techniques to minimise site runoff and prevent runoff entering the wetland from the Waimeha proposal. The proposal includes the use of swales, permeable paving/ materials and the limiting of impermeable surfaces.

Grass swale and flow direction

Waimeha neighbourhood boundary

Boundary drain



B4 | Linear Park

This sketch shows the relationship between the Linear Park and the apartments. The higher residential of the apartments is offset by the provision of the Linear Park and the inclusion of facilities such as community gardens and play equipment.

B5 | Pocket Park

The Pocket Park will contain plantings, seating, community gardens and space for stormwater filtration during heavy rain events.

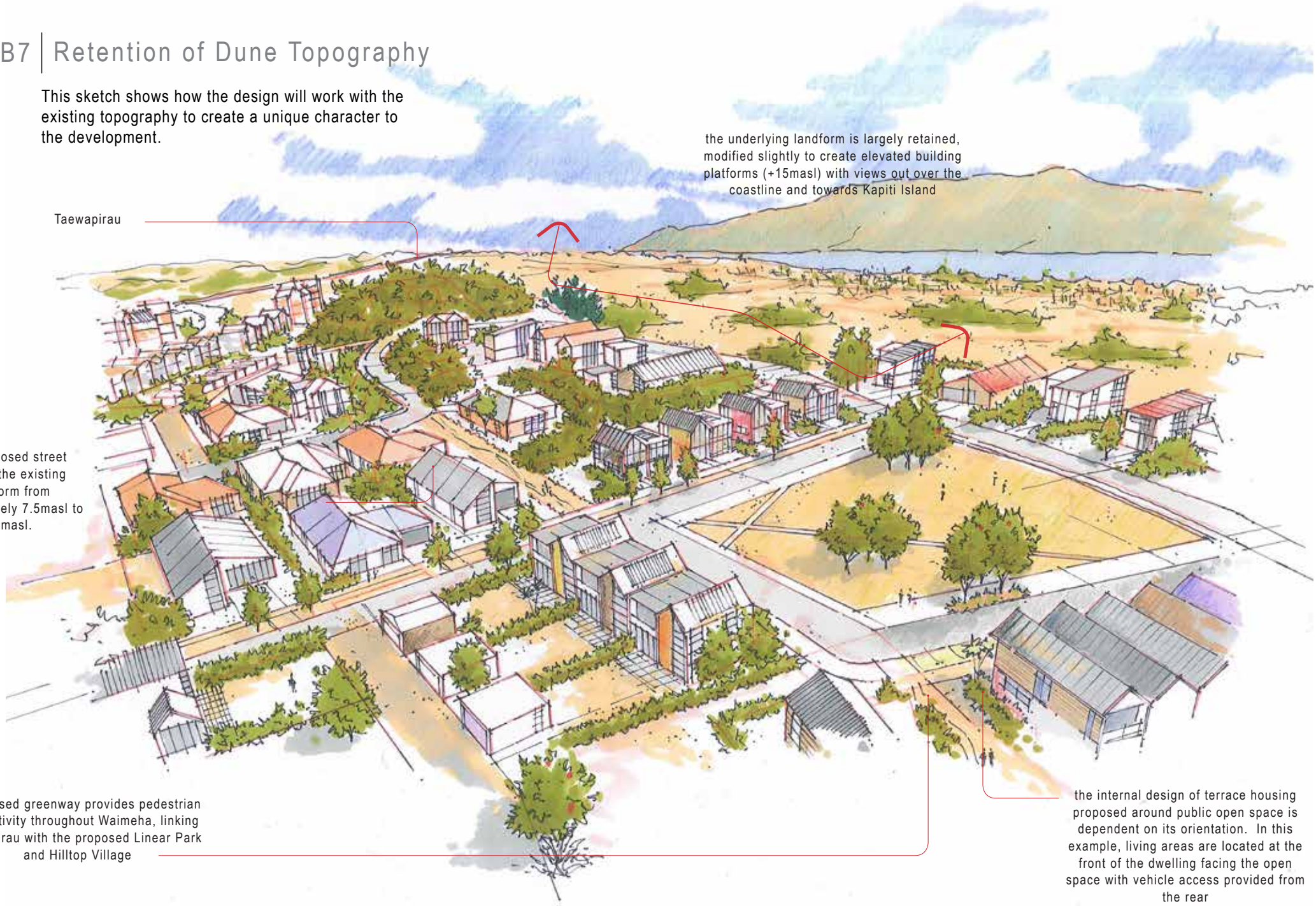
B6 | Relationship to the Golf Course

Modelling of potential development form against the proposed residential standards was undertaken along the boundary edge. The locations of each of the tee's in the golf course were then located in GIS and a standard conceptual layout developed in Golf Course Developments, the Urban Land Institute was overlaid onto the landscape to show where golf balls could potentially land. Based on the position of both tees, modelling shows that the majority of shots would not land within the residential sections. In terms of typical landing zones, from a first tee shot most shots would land 150m from the tee and generally 45m in from the offset of the concept. As most players are right handed, the chance of a hook shot occurring is also minimal.

Potentially 4-5 properties could be within range of balls occasionally landing in the property, excluding taking into account topography and any future landscaping on the boundary if pine trees on the golf course property are removed. However, these properties, currently zoned residential C also have generous set back requirements which reduces the risk of properties being hit by golf balls.

B7 | Retention of Dune Topography

This sketch shows how the design will work with the existing topography to create a unique character to the development.



B8 | Greenway

The greenway is a 6m corridor which links Taewapirau in the south through to the Hilltop village and wetland in the north. The path is linear but varies in gradient as it rises over and down existing dunes. The path would be formed using permeable materials and would form a key off road pedestrian and cycle link throughout the neighbourhood. Planting would be minimal allowing views into the corridor from adjoining properties and there would be a covenant restricting fencing being installed along its boundary.

There is the potential for the greenway to be used as an overland flow path for stormwater and a timber edge may be constructed along its edge to direct water. This would also assist with delineating property boundaries while retaining an open character to meet CPTED principles.

Landscaping edge will be secured through covenants on private properties.

B9 | Planting Palette

The primary focus of planting should be using indigenous species. Species should be carefully selected to ensure that they are not likely to pose a threat to the ecological values of adjacent wetland remnants. Planting mixture should be appropriately sited to minimise shading and canopy overhang on surrounding residential properties while assisting with providing privacy between dwellings. All species should be planted at suitable densities to reduce maintenance/weed issues. Further plant species can be added to the list which share similar ecological conditions as outlined in this planting palette.
Final landscape plans for public areas and road ways will need to be submitted to Council for approval prior to construction.
The following images are a selection of possible, suitable native species:

Street Trees

Sophora chathamica
coastal kowhai

Kunzea ericoides
kānuka

Cordyline australis
cabbage tree

Dry Duneland

Shrubs / Ground Cover

Asplenium oblongifolium
shining spleenwort

Arthropodium cirratum
rengerenga

Chionochloa flavicans
miniature toetoe

Coprosma repens
taupata

Euphorbia glauca
waiuatua

Festuca coxii
blue grass

Hibiscus trionum

Libertia peregrinans
NZ iris

Muehlenbeckia complexa
pohuehue

Phormium cookianum
mountain flax

Trees

Alectryon excelsa
titoki

Cordyline australis
cabbage tree

Kunzea ericioides
kanuka

Myrsine australis
mapou

Myoporum laetum
ngaio

Olearia paniculata
akiraho

Pittosporum tenuifolium
kohuhu

Duneland Wetlands

Shrubs / Ground Cover


Carex secta
pukio


Coprosma robusta
karamu


Cortaderia fulvida
toetoe


Hebe stricta var. atkinsonii
koromiko


Leptocarpus similis
oioi


Phormium tenax
harakeke

Trees


Carpodetus serratus
putaputaweta


Cordyline australis
cabbage tree


Leptospermum scoparium
manuka


Pseudopanax arboreus
five finger

Greenway


Acca sellowiana
feijoa


Arthropodium cirratum
rengerenga


Chionochloa flavicans
miniature toetoe


Cordyline australis
cabbage tree


Myoporum laetum
ngaio


Phormium cookianum
mountain flax

Plant Schedule

Code	Botanical name	Common name	Size	Notes
AS	Acca sellowiana	feijoa	Pb12	
AE	Alectryon excelsa	titoki	Pb95	Birds - Oct-Mar
AC	Arthropodium cirratum	renga renga	Pb5	
AO	Asplenium oblongifolium	shining spleenwort	Pb5	
CS	Carex secta	pukio	Pb3	
CAR	Carpodetus serratus	putaputaweta	Pb18	Birds - Sept - May
CF	Chionochloa flavicans	miniature toetoe	Pb5	Birds - Feb-April
COR	Coprosma repens	taupata	Pb8	Birds - Jan-March
CR	Coprosma robusta	karamu	Pb8	Birds Feb-June
CA	Cordyline australis	cabbage tree	Pb18	Birds - Jan-April & Nov
CF	Cortaderia fulvida	toetoe	Pb12	
DS	Dysoxylum spectabile	kohekohe	Pb95	Birds - April-July
EG	Euphorbia glauca	waiuatua	Pb3	Threatened
FC	Festuca coxii	blue grass	Pb3	
HS	Hebe stricta	koromiko	Pb5	Birds
HT	Hibiscus trionum	hibiscus	Pb3	
MU	Metrosideros umbellata	southern rata	Pb95	Birds
KE	Kunzea ericoides	kanuka	Pb8	
LS	Leptocarpus similis	oioi	Pb3	
LEP	Leptospermum scorparium	manuka	Pb5	
LP	Libertia peregrinans	NZ iris	Pb3	
MC	Muehlenbeckia complexa	pohuehue	Pb3	
ML	Myoporum laetum	Ngaio	Pb40	
MA	Myrsine australis	mapou	Pb8	Birds - March-April
OP	Olearia paniculata	akiraho	Pb18	
PC	Phormium cookianum	mountain flax	Pb12	Birds - Feb-Mar & Nov-Dec
PHT	Phormium tenax	harakeke	Pb12	Birds - Feb-April & Nov-Dec
PT	Pittosporum tenuifolium	kohuhu	Pb40	Birds Oct-June
PA	Pseudopanax arboreus	five finger	Pb40	Birds Feb-May
RS	Rhopalostylis sapida	nilkau	Pb95	Birds
SM	Sophora microphylla	kowhai	Pb95	Birds - Aug-Nov

Section C | Waimeha Movement Network

C1 | Street Hierarchy

Te Ara Kawakahia will form a logical and direct route through Waimeha and forms part of a north-south pedestrian, cycle and vehicle corridor linking all parts of Ngarara together. Sections of this collector road are designed as a 'Main Street' where it passes through mixed use/village areas, to create activity hubs suitable for reduced traffic speeds, allocated parking, crossing points, drop off areas and a pedestrian friendly local street environment. This provides opportunities for retail and/or commercial activity as well as community amenities (e.g. a school or childcare facilities), focal points (e.g. Kawakahia Wetland) and places of cultural importance. The suggested reserve width varies from 14m to 23m depending on its location.

Residential Streets and lanes are provided in Waimeha. These range from wider streets incorporating parking and street trees to rear lanes serving residential and commercial lots in medium to higher residential areas. Suggested road reserves ranges from 5-7m for lanes and 10-15m for residential streets.

Neighbourhood streets will respond to natural and topographical features such as valleys, vegetation and dunes, providing limited traffic flows especially along the dunes. These streets will be characterised by: narrow carriageway widths, planting either side of the carriageway; and the use of swales and semi-permeable surface materials such as crushed aggregate gravels. Suggested reserve width of 10.4m. This is to include 6m carriageway and a 4.4m corridor for swales and planting.

For more significant streets wider carriageways have been proposed as outined in the street typologies covered in C3.

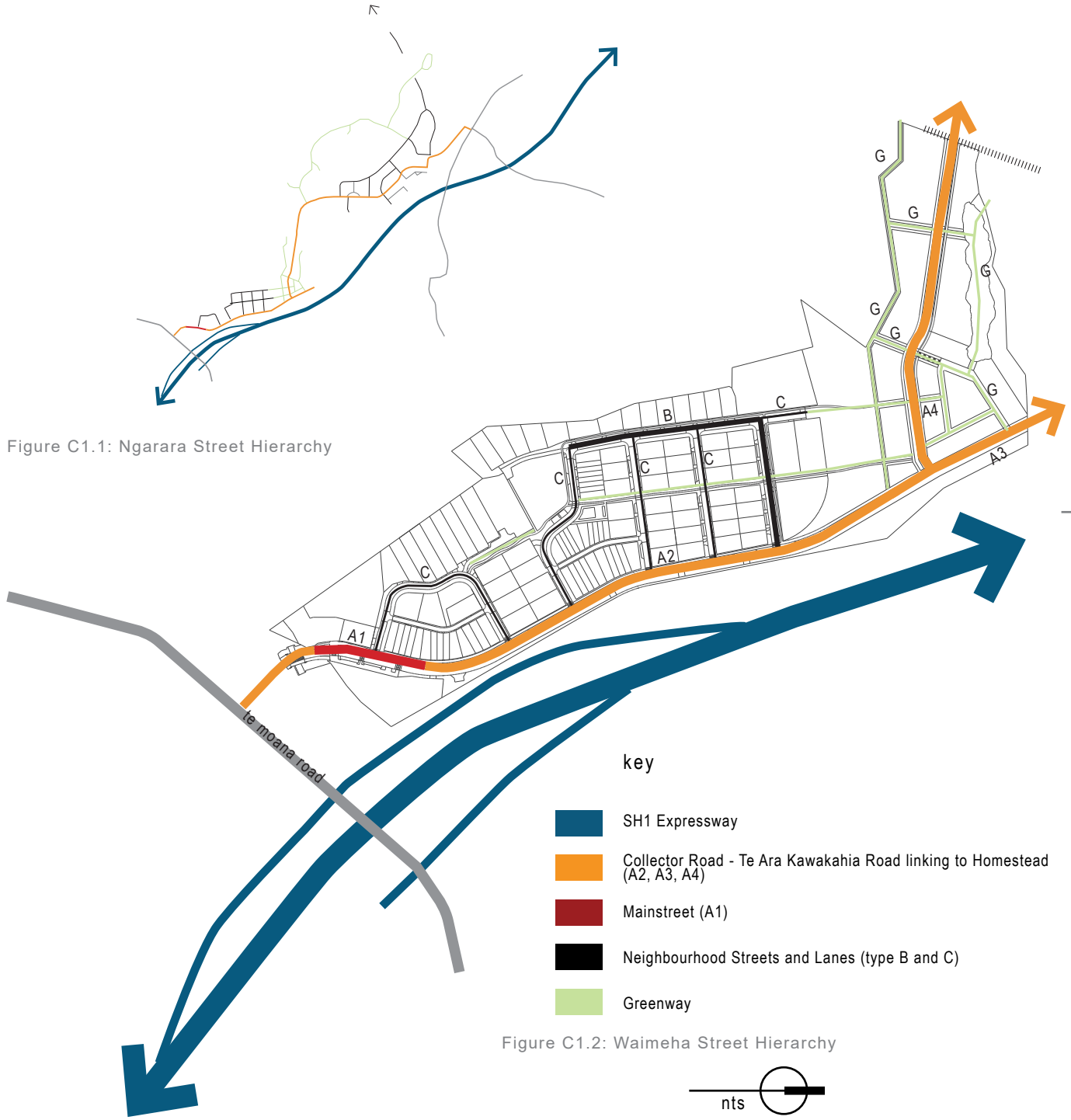
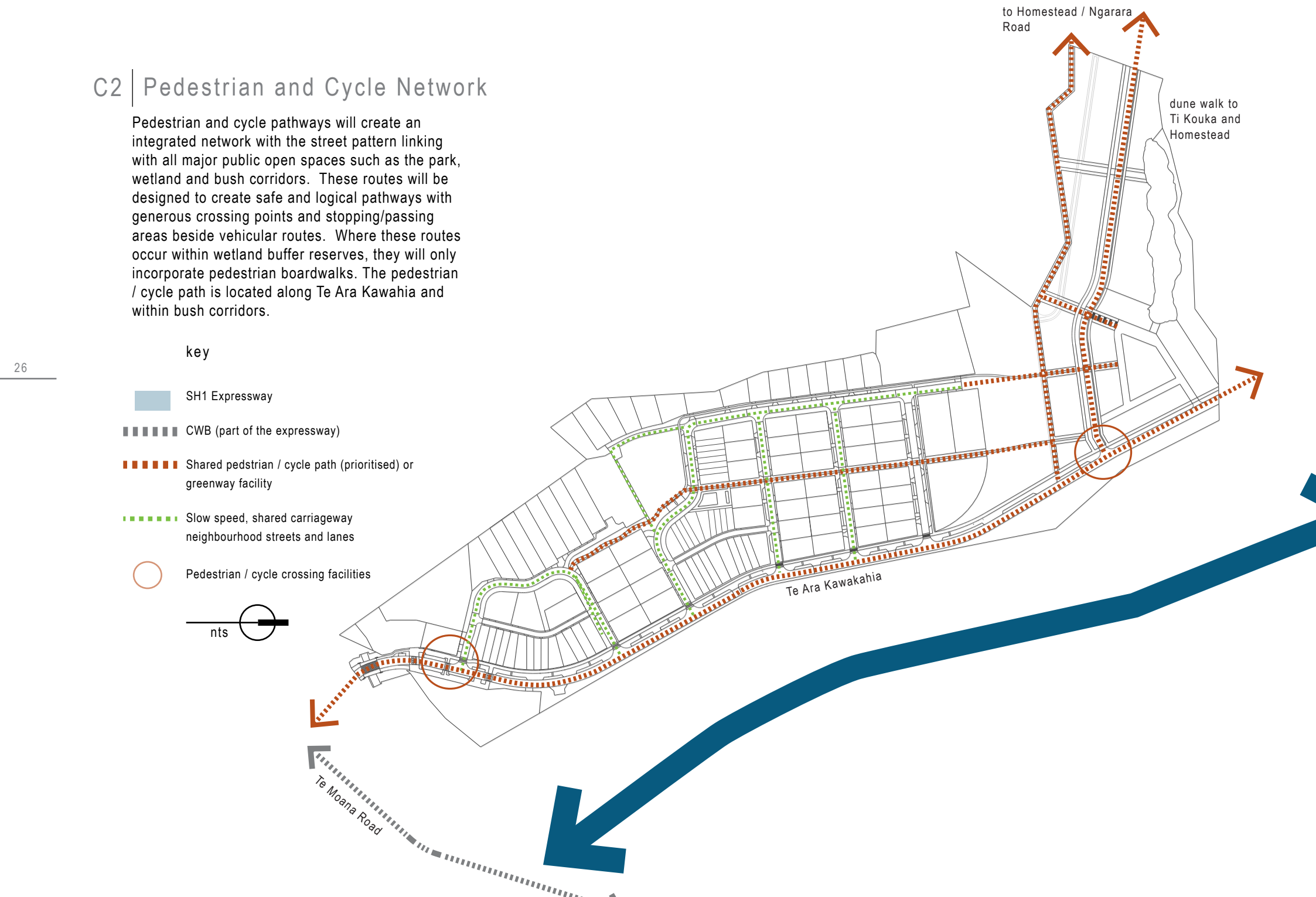


Figure C1.1: Ngarara Street Hierarchy

Figure C1.2: Waimeha Street Hierarchy

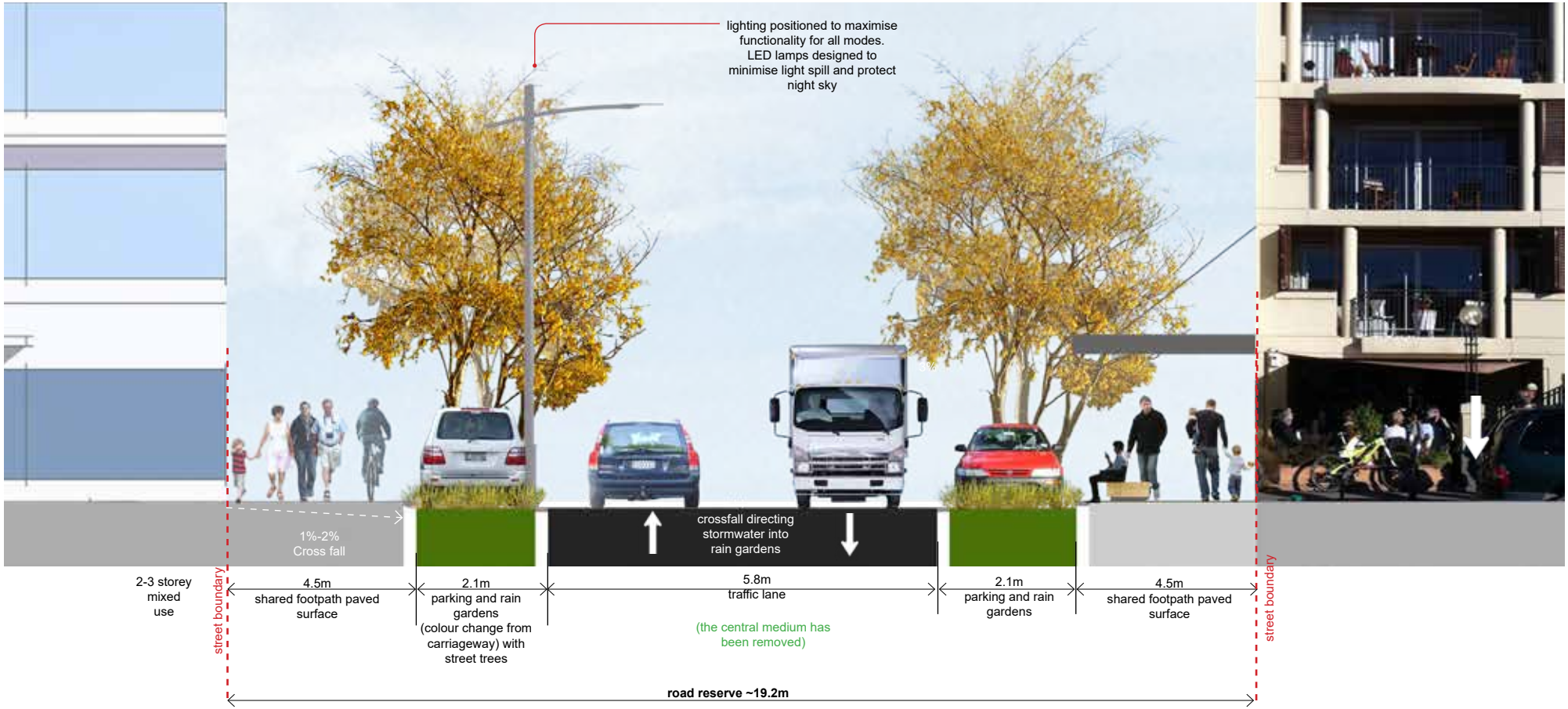
C2 | Pedestrian and Cycle Network

Pedestrian and cycle pathways will create an integrated network with the street pattern linking with all major public open spaces such as the park, wetland and bush corridors. These routes will be designed to create safe and logical pathways with generous crossing points and stopping/passing areas beside vehicular routes. Where these routes occur within wetland buffer reserves, they will only incorporate pedestrian boardwalks. The pedestrian / cycle path is located along Te Ara Kawahia and within bush corridors.



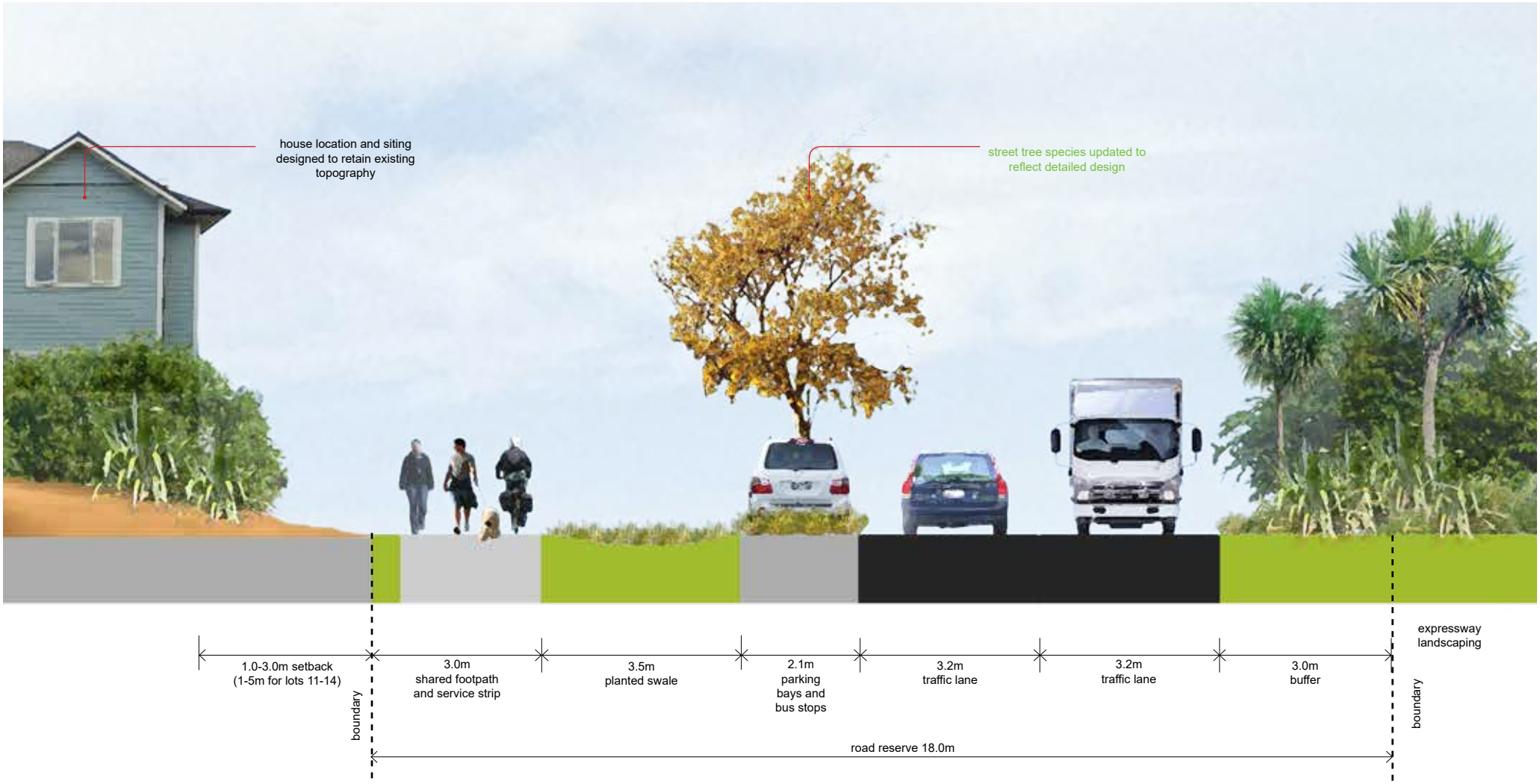
C3 | Street Types

A series of street types have been developed for the Ngarara development. The streets vary in design depending on their principle purpose. Full cross sections and details are provided below and on the following pages:

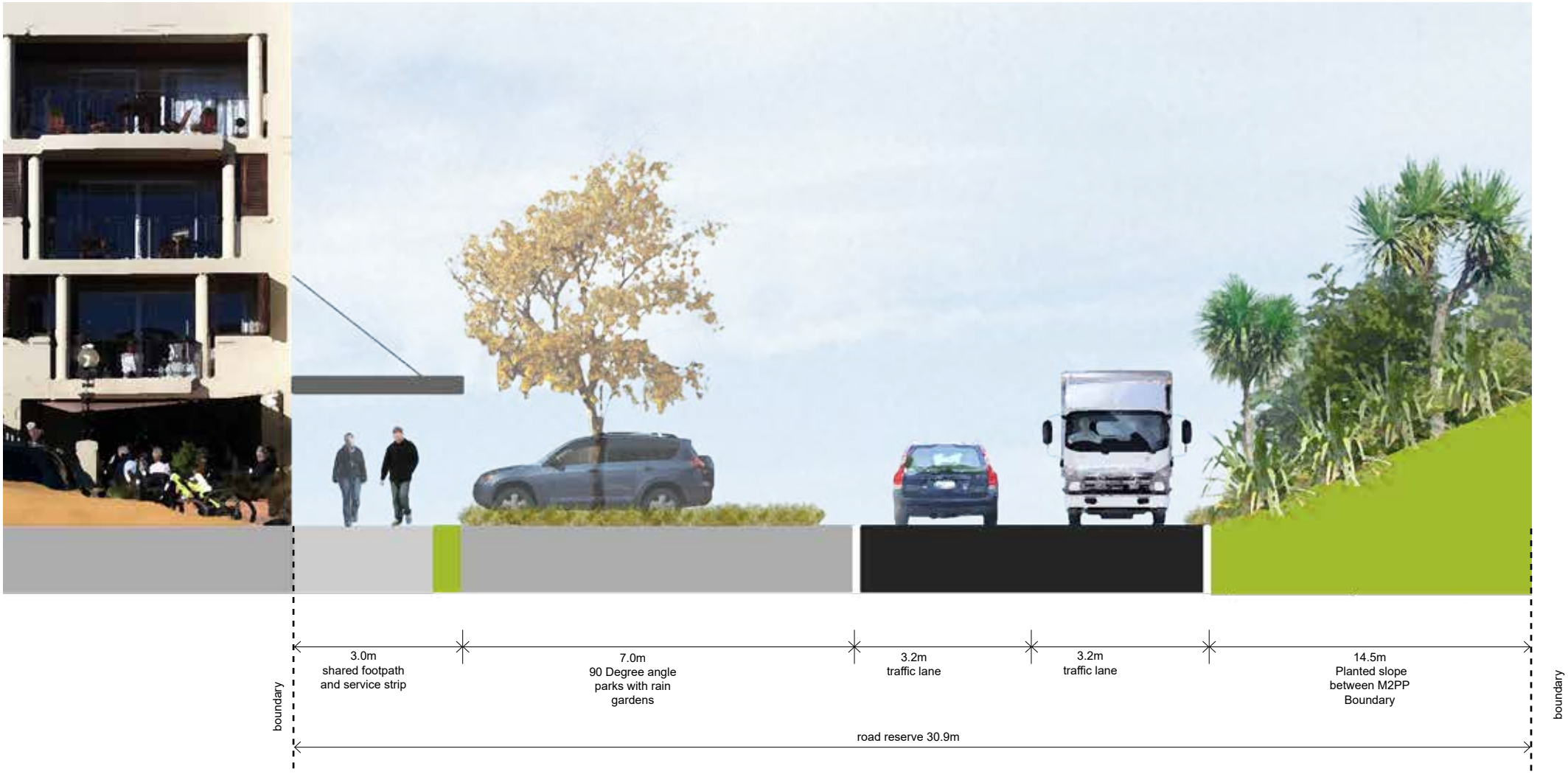


Street Type A1 – Te Ara Kawakahia (Varies), Main Street

0 1 2 3 4 5m

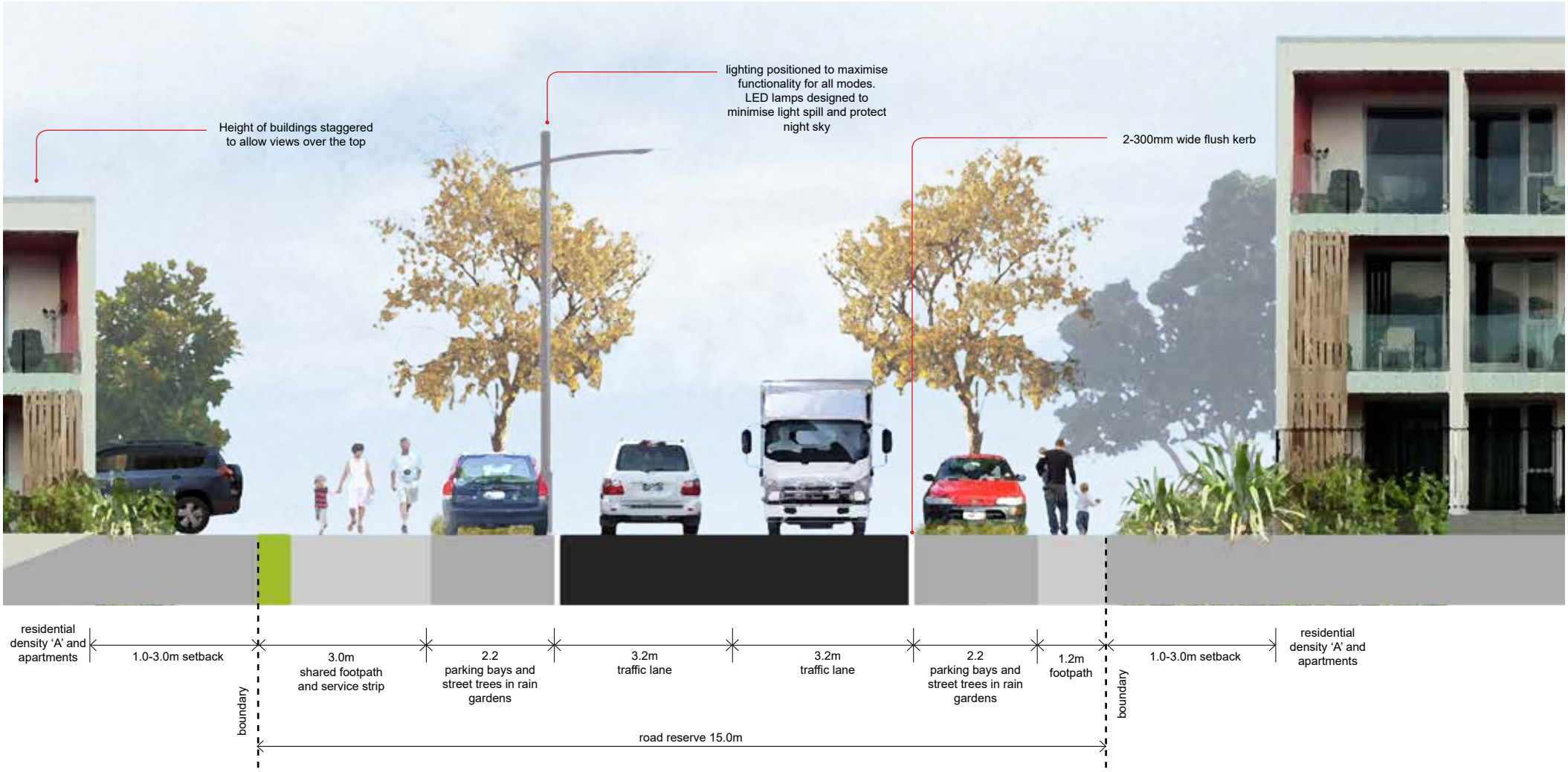


Street Type A2 – Te Ara Kawakahia - Adjacent to expressway (18m)



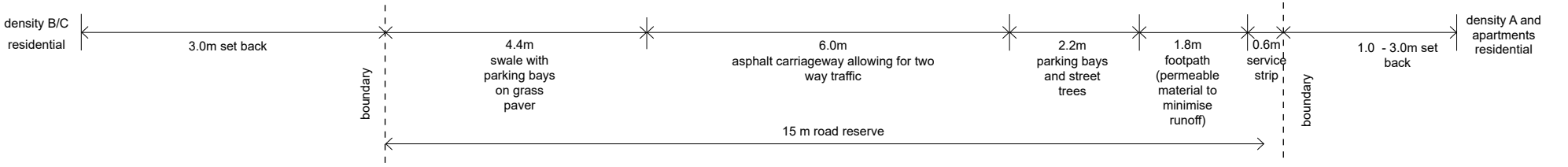
Street Type A3 – Te Ara Kawakahia- Passing over dune connecting to Ti Kouka (30.9m)

0 1 2 3 4 5m

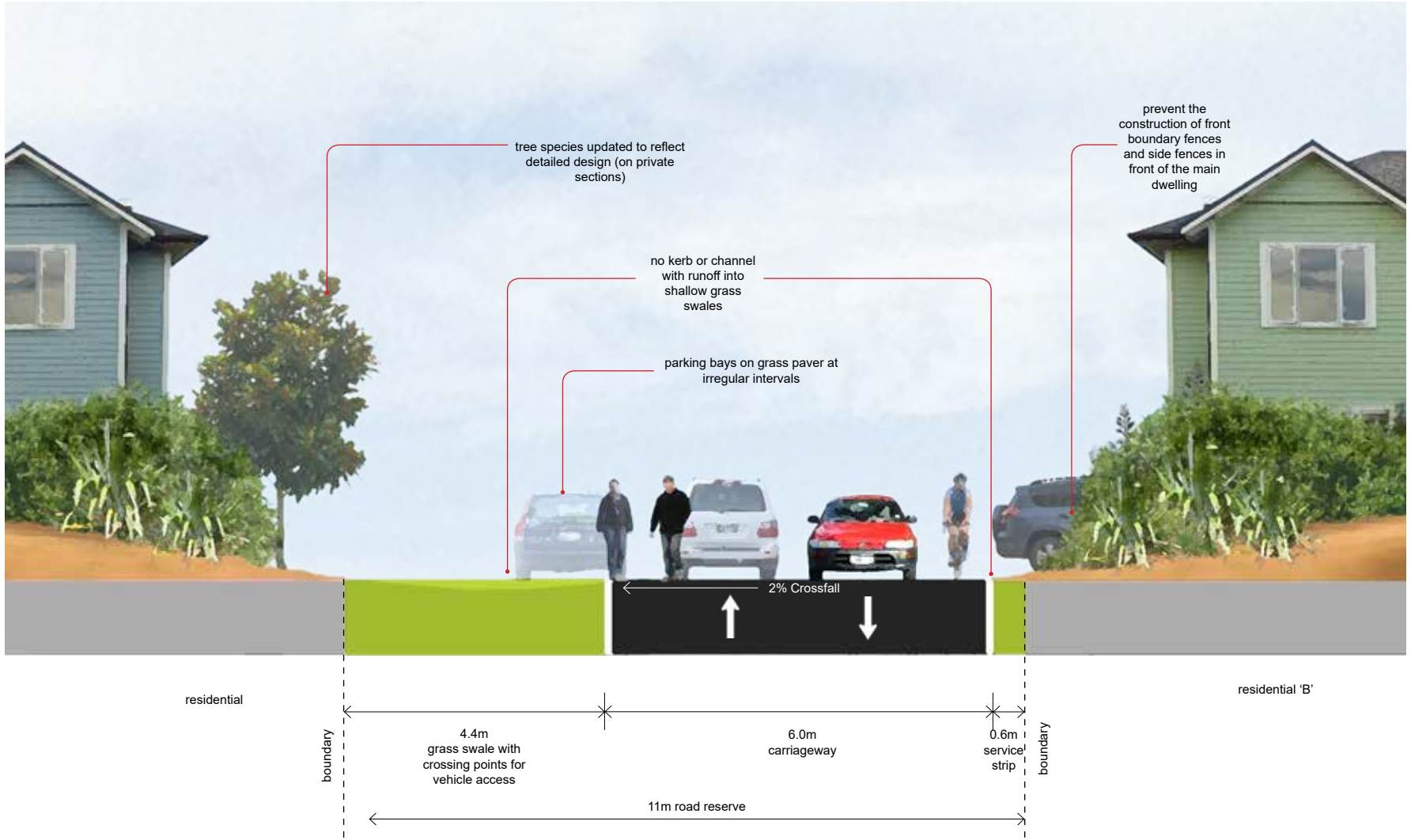


Street Type A4 – Collector Road linking through to Homestead (15m), general areas

0 1 2 3 4 5m



Street type B – Neighbourhood Street (north-south, 115.8m)



Street type C – Neighbourhood Street (east-west - 11m)

0 1 2 3 4 5m

Access Land (Private)

The section to the right shows a low speed residential lane which occupies a 6m space. The carriageway is 4.0m wide with parking bays located alternatively along its length.

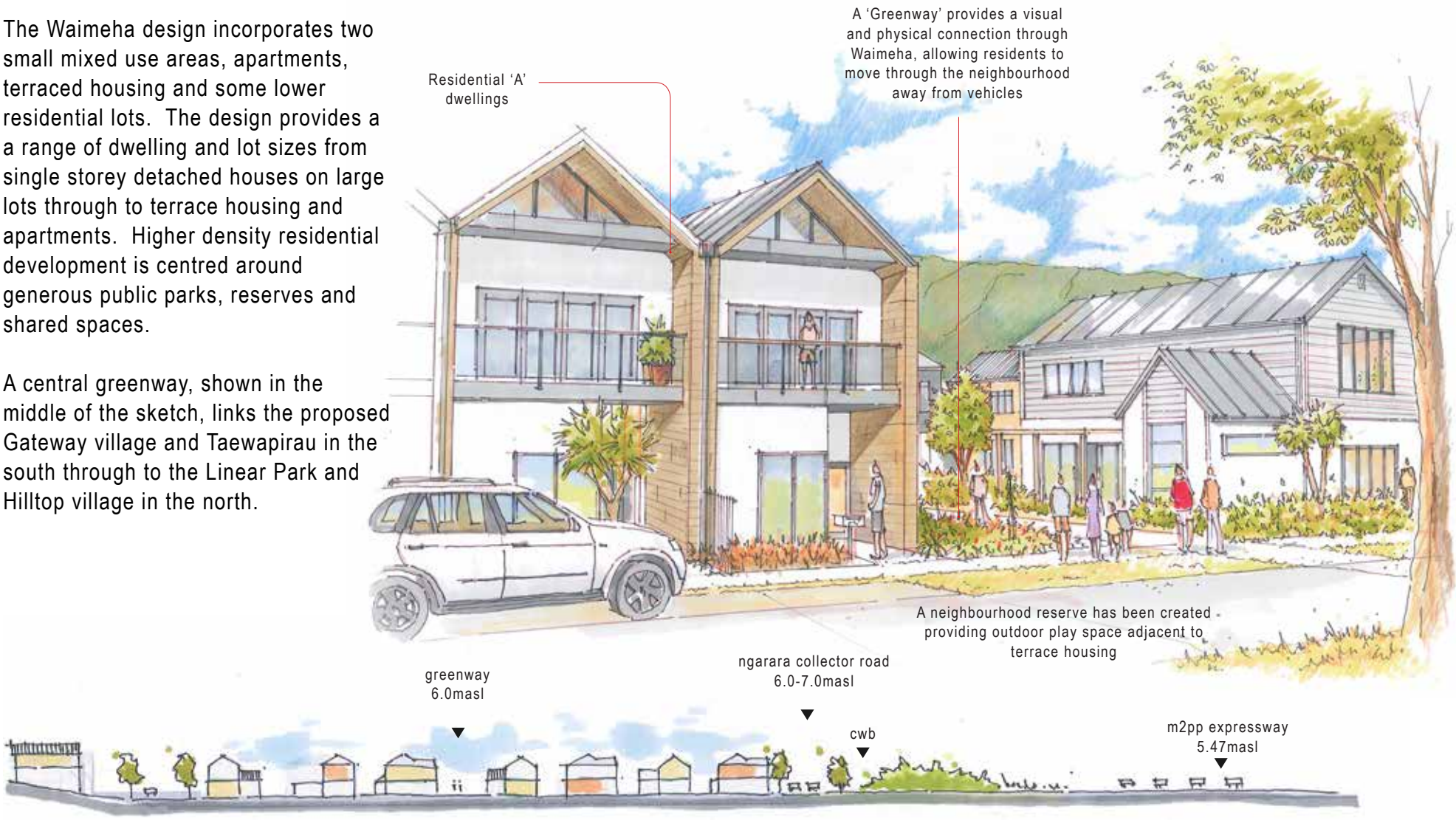
This lane style road is a good example for providing rear access for terrace housing (res A). It is recommended that it is only used for relatively short distances, 50-100m, where it is possible to have a clear line of sight along its length.

Section D | Built Form

D1 | Built Typology

The Waimeha design incorporates two small mixed use areas, apartments, terraced housing and some lower residential lots. The design provides a a range of dwelling and lot sizes from single storey detached houses on large lots through to terrace housing and apartments. Higher density residential development is centred around generous public parks, reserves and shared spaces.

A central greenway, shown in the middle of the sketch, links the proposed Gateway village and Taewapirau in the south through to the Linear Park and Hilltop village in the north.



Section B - B

The different typologies facilitate a range of densities and styles of development. The vision revolves around achieving strong character and residential amenity within each typology. The character and form for each typology are identified in purpose statements, which are in the table below. Enforceable standards will shape the development of each typology and ensure that the purposes of those areas will be achieved. The purpose statements and standards ensure that high levels of residential amenity are achieved within each site and between sites, neighbouring properties and the wider environment. A summary of the purposes and associated standards for each typology are in the subsequent pages. There are also Waimeha wide standards, which are apply to the whole Waimeha area.

Mixed Use A

- Primary use is commercial activities. Typical size expected to be 60m2/retail premise
- High quality public realm that is a hub of activity and is pedestrian friendly
- Residential activity permitted above the ground floor. Typical floor area expected to be 100m2/ unit
- High quality design, especially at the ground floor. Buildings designed to allow active atgrade street fronts and building entrances, while allowing private balcony areas above ground level
- Consolidated parking and service facilities to the rear of the buildings or in naturally ventilated semi-basement levels
- Flexibility to have community activities e.g. a child care centre or medical practice

Mixed Use B

- Apartment buildings which are primarily residential; providing the highest residential density within Waimeha. Can have a range of unit sizes, but the typical unit is expected to be 100m2, providing 40HHU/Ha
- Buildings adjoin public open space areas to provide for amenity and recreation
- Business (commercial, retail, cafes) permitted on the ground floor
- Shared common space for the like of parking, utilities and facilities. For larger apartments, it is encouraged that these services be provided in naturally ventilated semi-basement parking levels
- Shared common amenity area. Apartment buildings are developed around this space
- Integrated buildings into the wider landscape grounds
- Each residential unit has a private deck or courtyard for personal outdoor living
- An alternative use in this zone is for a school or other community facilities

Residential A

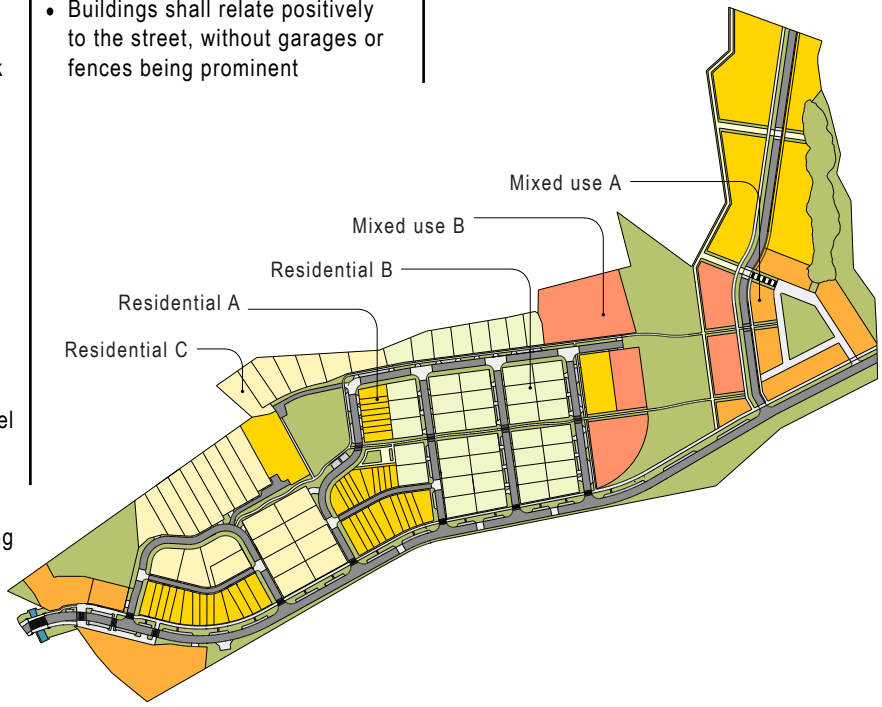
- Medium density residential situated around high amenity public spaces to achieve an efficient use of land
- Lot sizes range from 200-400m2, averaging 300m2 / 30HHU/Ha; and a typical unit size is 140-180m2 (over 2 storeys)
- Uniform terraced and semi-detached residential buildings. Building height will follow the slope of the land and be maximised along the NLR, adjacent to open space and on corners
- Generally one unit per lot. However each lot within the area directly adjoining the pocket park and directly adjoining the Mixed Use B apartments (by the linear park) can contain two units. Where there are two units within one lot, they will be contained within one dwelling building, having one unit per storey
- Buildings located close to the street frontage (around 2m setback) and have a strong streetscape
- Space is provided for ground level outdoor living areas (which can be supplemented with balconies and roof gardens)
- Buildings close to and overlooking open space to provide amenity
- Site access and parking is off lanes or right-of-ways at the rear of the site, in order to enhance the street appeal

Residential B

- Medium density residential to achieve an efficient use of land and suitable on site amenity
- Lot sizes range from 250-500m2, averaging 400m2 / 25HHU/ Ha; and a typical unit size is 180-200m2 (over 2 storeys, and including inbuilt garages)
- Primarily two storey stand-alone dwellings
- One unit per site
- Primary outdoor living areas which are small (approx. 100m2), discrete, sunny and semi-private, with high amenity
- Buildings shall relate positively to the street, without garages or fences being prominent

Residential C

- Low density residential
- Lot sizes range from 500-750m2, averaging 600m2 / 10-15HHU/Ha.
- Larger sections to cater for more outdoor open space and on-site amenity
- One unit per site
- Flexibility for a range of house designs, including single and double storey stand-alone dwellings



The Waimeha wide standards are outlined below:

Waimeha Wide Standards

- Design of each building will need to meet the design guidance outlined in section E of the masterplan. However, where there is specific guidance provided in this design code for the Waimeh Neighbourhood, this guidance will supercede the masterplan guidance
- For the purposes of setback and fence rules, the residential lanes and greenway are not considered streets of a site frontage.

The following are exemptions to the built form standards apply:

- Maximum building height excludes gables up to 1m high, eves, chimneys and utilities. This is to allow design flexibility for architectural features up to 1m above the maximum building height. Features are considered to be roo elements and chimneys but not habitable space.
- All other built form rules (i.e. excluding max building height) can be breached by up to 10%
- Outside of the built form guidance in section E of the Masterplan for the site, signage requirements default to those currently in the KCDC District Plan.

Explanation: controlling the architectural and built form response of the development is integral to maintaining the amenity and environmental and social outcomes sought from the masterplan.

All transportation activities (parking, access, loading, etc.) shall default to the transportation section of the Operative KCDC District Plan, with the following exceptions/additions;

- Only one car park is required per residential unit.
- No private vehicle access shall be gained off the Ngarara Link Road but houses adjoining the spine road must have a pedestrian gate, visible entrance and letter box onto the spine road.
- For all residential areas; all bin storage areas and where applicable clothes lines are to be located to the rear of the property away from the street, unless they are screened from view.

Explanation: this will achieve better streetscape character and amenity.

No fencing is permitted in the front yard, in front of dwellings or along the greenway in front of the building line. Fencing is permitted in side yards behind the front line of a dwelling.

Explanation: Lower fence heights facilitate active surveillance and a strong streetscape a character along the greenway and streets. Refer to D7 - Fencing for fencing options.

Each unit adjoining the greenway shall;

- Have at least one window off a common living area (includes kitchens) facing the greenway, and
- A maximum building setback of 3m from the site boundary that adjoins the greenway.

Explanation: This is to encourage both overlooking of the greenway and passive surveillance.

A community garden is able to be provided in the Waimeha neighbourhood so long as it meets the following standards:

- A fence of no more than .6m high is provided around the extent of the garden
- Only 1 toolshed which meets the residential standards for ancillary buildings is able to be provided
- Drip feed irrigation system is provided only
- An incorporated society is set up to run and manage the garden space
- The community garden needs to be provided in an open space zone.

Explanation: A community garden space can provide residents with the ability to grow their own vegetables where they do not currently have space to do so if they are living in a higher density residential land use. It also provides an educational opportunity for people to learn about growing vegetables. It also provides a space to enable residents to interact with each other over this gardening activity. However, the design of the garden needs to be appropriately managed to not compromise amenity values in open space areas.

D2 | Mixed Use 'A'

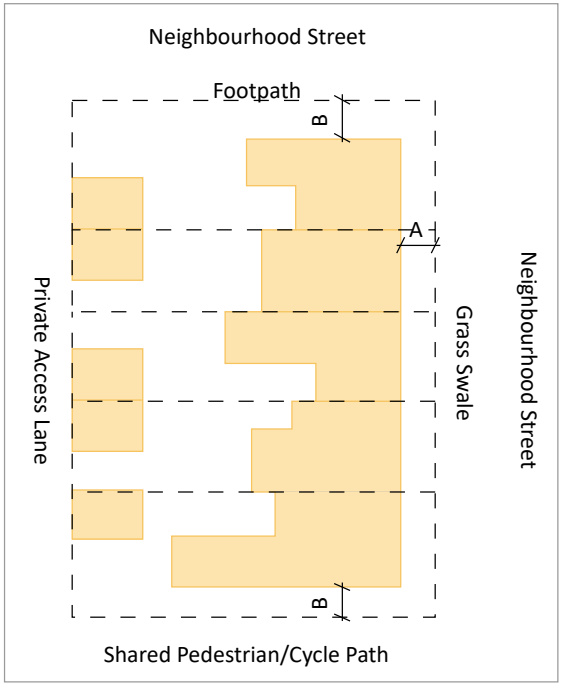
Mixed use buildings are proposed at the Gateway to Waimeha and at the Hilltop Village providing for the main commerial area. There is some flexibility for commuity activities such as a childcare centre or medical practice. These buildings will include ground floors with generous floor to floor heights to allow for possible retail on the ground floor and at corners on the main street providing a pedestrian friendly environment. Upper floors will be designed to accommodate residential uses with the possibility for commercial use over time.

First and second floor apartment - typically 100m² in size. Two-three stories with the option for a loft space on the fourth floor

Provision of verandahs along street frontages and corner sites to be emphasised in the design

Ground floor retail / office space with a strong relationship to the street - 50-60m² of retail space per lot

▲ Typical street elevation



Front Yard	A Minimum = 0m Maximum = 3m
Side Street Yard Setback	B Minimum = 2m
Side Yard Setback	C Not Applicable
Rear Yard Setback	D Not Applicable
Buildable Area	
Lot Line	
Potential Building Footprint	

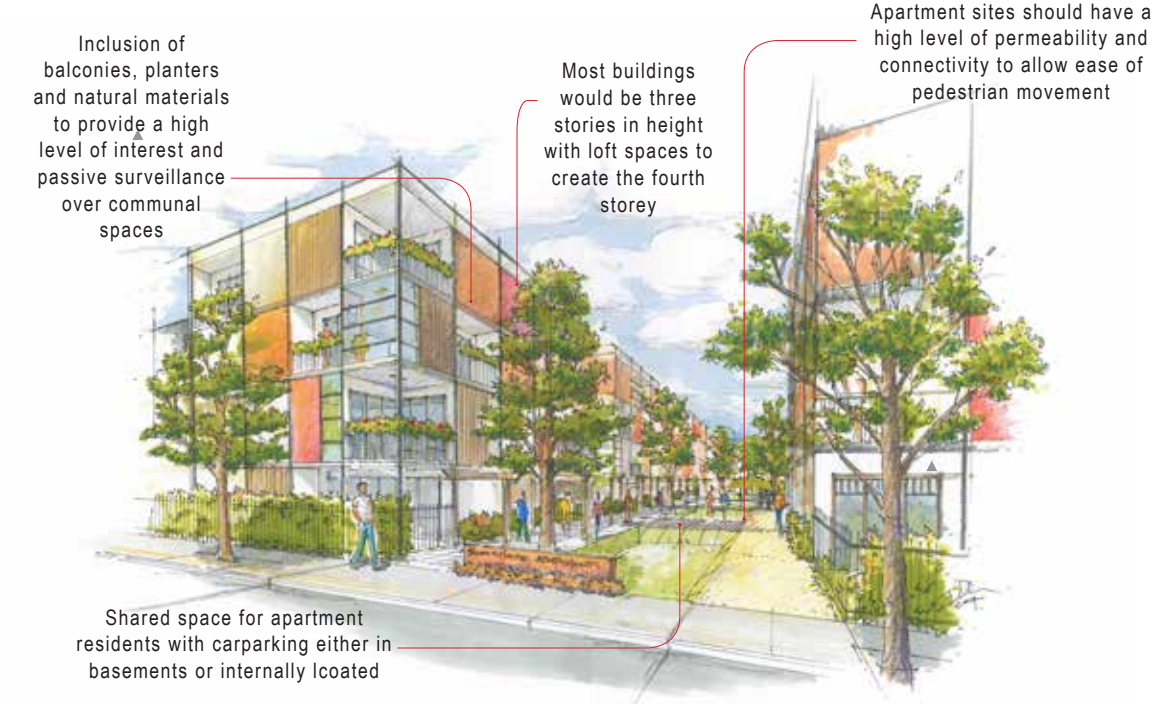
Building Height	Site Coverage	Floor to floor heights	Setbacks	Activities	Verandas	Floor Area	Facilities
Maximum of 12m, which is typically 3 or 4 storeys. The majority of developments are likely to be only 3 storeys but 4 storeys is permitted. Note: Can have a fourth storey loft area containing apartments within the roof space	Maximum 50% Note: This includes structures that exceed 1m in height from ground level (e.g. entry features, raised decks & balconies)	Minimum of 3.5m on ground floor and 3m for all other floors (excluding loft space)	Front Setback: Minimum 0m Maximum 3m Setback from any residential property: Minimum 5m Note: Where there is a leg-in or right-of-way access directly adjoining the site, the setback shall either be 3m from the far side of the access way (opposite the mixed use site) or 1m (whichever is greater)	Commercial activities, including entertainment activities are permitted Community activities are permitted in the gateway mixed use area. Any play or outdoor facilities associated with these activities need to be located facing the NLR and be north facing. No other types of activities are permitted	Verandas must be provided along the street frontage over the footpath	The maximum floor area for any commercial activity is 200m2 per premise; with the exception of one premise at the Gateway area which can maximum floor area of 700m2	Bike storage facilities must be provided either within the site or in a shared bike facility in the Waimeha Neighbourhood. All parking, loading and unloading, vehicle manoeuvring areas, services and bins storage shall be at the rear of buildings, away from the main public spaces. Consolidated parking areas and shared manoeuvring space must be provided All waste and recycling bins shall be screened. Alternatively, parking, services and bin storage can be contained in naturally ventilated semi-basement parking levels.
Explanation: Sufficient height is required to cater for intensification to facilitate a hub of activity. The building heights are to be most generous in buildings surrounding public open spaces and on street corners	Explanation: Site coverage will ensure there is sufficient building stock offset by space to accommodate public and private ongrade parking and open space	Explanation: This is to accommodate a mix of uses over time	Explanation: Tighter setback restrictions allow for a more urban local centre along the main road, increasing intensity of activity and creating a strong street edge. The residential property setback is required to mitigate shading and other amenity effects on adjoining residential properties	Explanation: This is to provide for a range of activities and facilitate a hub of urban activity	Verandas must be provided over the ground level	Explanation: This will prevent big box retail and ensure there is sufficient capacity for a wide range of commercial activities and of various scales	Explanation: Bike infrastructure will encourage biking and active transport Rear or basement services ensure everything that could degrade the amenity and character of these public spaces are located out of sight from the building frontages and main common spaces. Located the majority of parking to the rear also facilitates a more pedestrian friendly environment.



▲ Typical mixed use styles - photos

D3 | Mixed Use ‘B’

Mixed use ‘B’ consists of higher density residential apartments adjoining the Linear Park that allow for small scale or home-based retail and/or business uses such as corner cafe/haridresser may be permitted where appropriate on the ground floor. They provide shared common space for parking, utilities and facilities. Each residential unit is required to have a deck, or private courtyard for personal outdoor living. An alternative use in this zone is for a school or other community facilities.



▲ Typical street elevation

	Front Yard	A	Minimum = 2m
	Side Street Yard Setback	B	Minimum = 2m
	Side Yard Setback	C	Not Applicable
	Rear Yard Setback	D	Not Applicable
	Buildable Area		
	Lot Line		
	Potential Building Footprint		

Building Height	Site Coverage	Floor to floor heights	Setbacks	Activities	Verandas	Floor Area	Hours of Operation	Decks	Facilities
Maximum of 12m, which is typically 3 or 4 storeys. The majority of developments are likely to be only 3 storeys but 4 storeys is permitted. Minimum 2 Storeys / 7m Note: Can have a fourth storey loft area containing apartments within the roof space. There are no recession planes in this zone.	Maximum 60% Note: This includes structures that exceed 1m in height from ground level (e.g. entry features, raised decks & balconies)	Minimum of 3m for all floors except loft spaces and alcoves no larger than 7.5m2	Front Setback: Minimum 2m Setback from any residential property: Minimum 5m Note: Where there is a leg-in or right-of-way access directly adjoining the site, the setback shall either be 5m from the far side of the access way (opposite the mixed use site) or 1m (whichever is greater)	Residential activities are permitted Business (retail, cafes are permitted where appropriate on the ground floor Community activities are allowed for within the designated educational precinct	All business activities shall provide a veranda along the length of their premise	The maximum floor area for any commercial activity is 150m2	Hours of operation for business activities shall be between 7.30am and 6.30pm	Each residential unit shall have a deck or private courtyard off a living space. The space shall be a minimum of 10m2	Bike storage facilities must be provided either within the site or in a shared bike facility in the Ngarara Zone. Consolidated parking areas and shared manoeuvring space must be provided All waste and recycling bins shall be screened
Explanation: Sufficient height is required to cater for intensification to facilitate a hub of activity. The building heights are to be most generous in buildings surrounding public open spaces and on street corners. The height should step down to accommodate sunny north facing balconies. Typically a 4 storey will only be used on a corner site	Explanation: This site coverage will ensure there is space to accommodate on-grade parking and common open space for residents	Explanation: This is to facilitate potential changes in use over time	Explanation: The restricted setbacks allow for higher density residential yield The road setback provides for a small front courtyard gardens The residential property setback is required to mitigate shading and other amenity effects on adjoining residential properties	Explanation: These apartments are primarily to provide high density residential development. Some business such as cafes, small format retail and offices are appropriate and will complement the urban activity	Explanation: This provides pedestrians sun and rain protection	Explanation: This will prevent big box retail and ensure there is sufficient capacity for a wide range of commercial activities and of various scales	Explanation: This is to mitigate effects of operation on the residents. Any business that wants hours that extend beyond this should be located in Mixed Use A where there more separation from residential units	Explanation: This is to provide some private (separate) outdoor space for each unit for amenity purposes	Explanation: This infrastructure will encourage biking and active transport. Consolidated facilities is required for functionality reasons Screening of bins will mitigate amenity effects

▲ Typical house styles - photos

D4 | Residential 'A'

Residential 'A' areas are high density, exclusively residential areas, similar to the Mixed Use B or Intensive Residential, but with a predominance of terrace, semi-detached and townhouse developments. There is one dwelling per lot and no provision for business activities on the ground floor and each unit is required to have a ground floor outdoor living area (which can be supplemented with balconies or roof gardens). There are no side yard requirements and buildings are ideally located close to the street to create a strong streetscape.

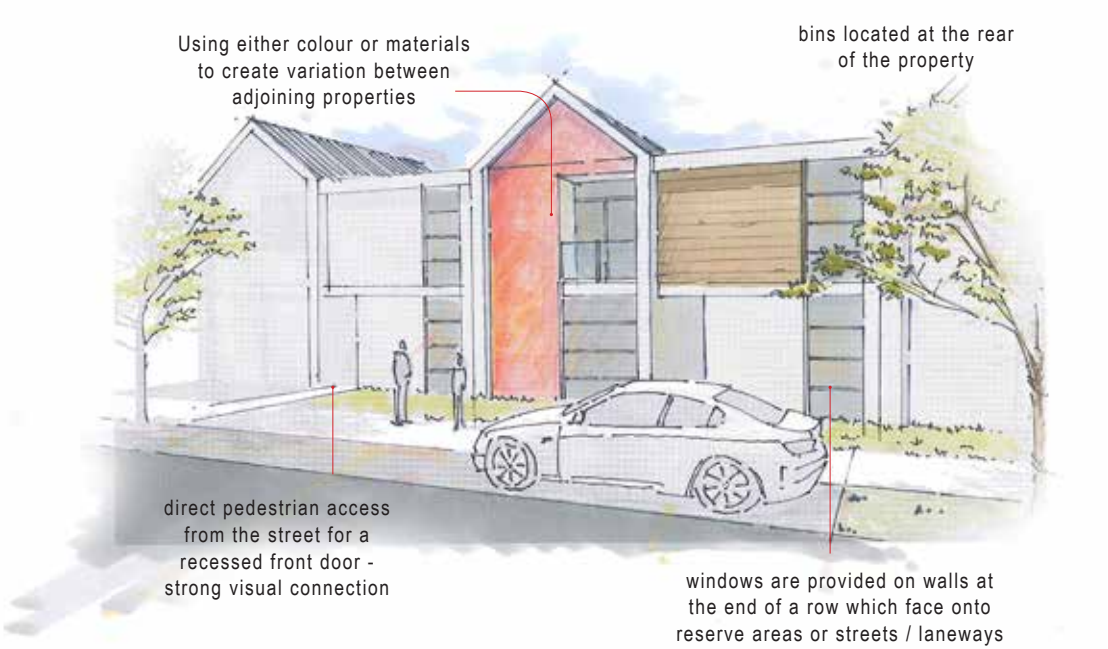
▲ Example of built form

Front Yard
Side Street Yard Setback
Side Yard Setback
Rear Yard Setback
Buildable Area
Lot Line
Potential Building Footprint

A Minimum = 1m Maximum =3m, 5m for lots 11-14
B Minimum = 1m
C Not Applicable
D Not Applicable

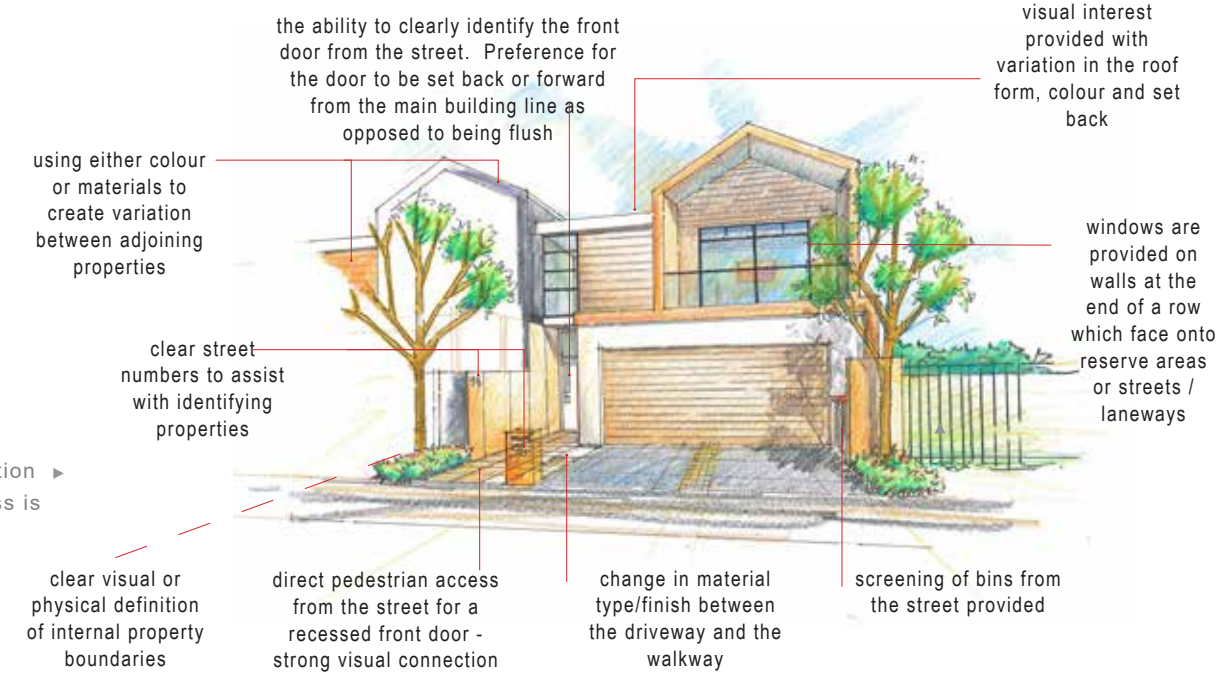
Building Height	Site Coverage	Setbacks	Accessory Buildings	Access and Parking	Uniformity & Staging of Development	Street Frontage	Fences
All dwellings shall be 2 or 3 storey with a max height of 10m Note: This rule does not apply to associated buildings such as garages There are no recession planes in this zone.	Maximum 50% Note: This includes structures that exceed 1m in height from ground level (e.g. entry features, raised decks & balconies)	Front Setback: Minimum 1m Maximum 3m, 5m maximum for lots 11-14 Note: There are no side or rear setback requirements except adjacent to streets where a 1m side setback is required For units with garaging facing the street in the front, a minimum setback of 5m is required.	Accessory buildings such as garages and sheds are permitted in the rear yard where they are no more than 3m high and have a length no greater than 8.9m along the side boundary	No vehicle access or garages shall be along the main street frontage except for south facing units onto the pocket park. These units can have parking/garaging provided at the front of a dwelling to allow indoor and outdoor living areas to be north facing	Each block of units shall be developed at the same time, prior to the parent lot being subdivided around a dwelling Each residential dwelling within the block shall have the same front setback	Each unit must have the front door and have a window from a common living area along the street frontage. Where garaging is allowed, the front door needs to be clearly visible with direct access from the street. Sceening of storage bins is also required.	No fences are to be constructed in the front yard, in front of the dwelling (note: hedges are not considered fences).
Explanation: This range allows for small built footprints with predominantly 2 storeys and occasionally 3 storey loft spaces or roof terraces	Explanation: This will typically create units with a floor area of 140-180m2 over two storeys, and allow for accessory buildings such as garages & sheds	Explanation: Having a maximum road setback will force buildings close to the street, which will facilitate a strong built edge along streets and active frontages overlooking the open space. They will create more space for outdoor living area to the rear of the section No side setback is required due to the terraced nature of houses As the site is controlled by front setbacks and site coverage, there is no need for a rear setback requirement	Explanation: This is to prevent bulk and shading effects on neighbours from accessory buildings up to 10m tall and along boundaries	Explanation: As these sites are relatively narrow, the majority of the street frontages could become garage doors and driveways. To facilitate stronger street appeal, vehicle access and parking shall be to the rear of these sections via a private laneway or right-of-way access	Explanation: Developing each block of terraced housing at one time is integral to ensuring the character of these buildings. To facilitate this development, development will need to occur over the parent lot prior to subdivision of each residential section. Having uniform setbacks within each block will mitigate amenity effects such as shading and privacy between occupants of those units, and provide better streetscape character.	Explanation: This is to increase street appeal and facilitate overlooking of the street and open space areas, instead of overlooking neighbouring units	Explanation: These buildings are close to the street and shall have a strong streetscape character. Barricading the properties with high fences will reduce this open character and amenity. Front fences are also generally discouraged for active surveillance purposes

▲ Typical house styles - photos



▲ Typical street elevation where vehicle access is at the rear

▲ Locations where the vehicle access from the front is possibe



Typical street elevation where vehicle access is at the front ▸

It is important that any large blank walls at the end of block are punctured with windows to add interest and prevent the development from looking unfinished. It also allows the residents to take advantage of the side yard as well as providing more light into internal rooms.

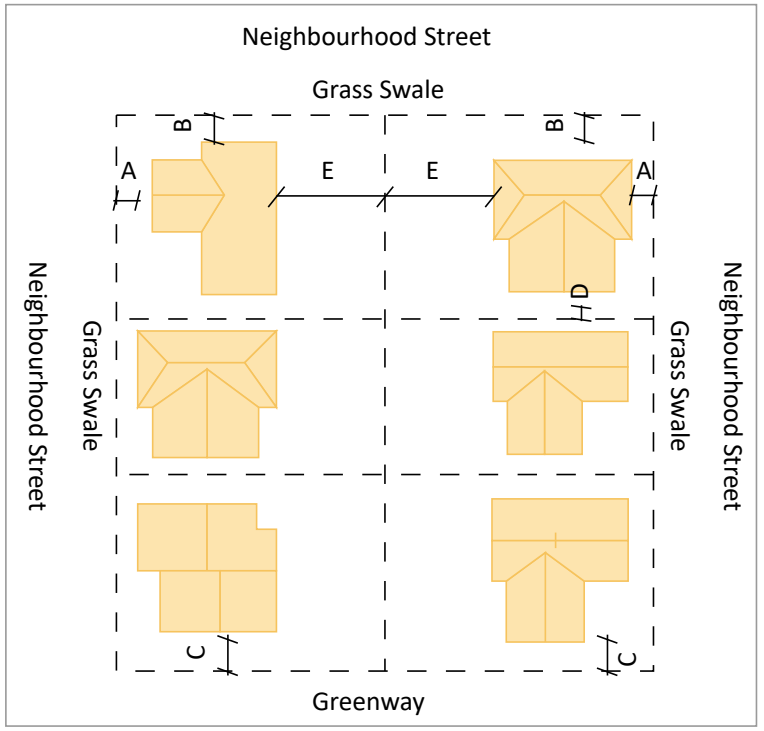
The use of structures protuding out from the end wall combined with material changes assist with lessening the perceived visual mass of the wall as well as providing interest.

End unit wall treatment ▲

D5 | Residential ‘B’

Residential ‘B’ areas are exclusively residential, providing a ‘medium’ level of density. Dwellings are typically two storey standalone, one per lot, and orientated to capture sunlight. Primary outdoor living areas, north or west facing of approximately 100m² provide discrete, sunny and semi-private spaces with high amenity.

▲ Typical street elevation



	Front Yard	A	Minimum = 2m
	Side Street Yard Setback	B	Minimum = 2m
	Greenway Setback	C	Maximum = 3m, no minimum
	Side Yard Setback	D	Minimum = 1m
	Rear Yard Setback	E	Minimum = 6m
	Buildable Area		
	Lot Line		
	Potential Building Footprint		

Building Height	Site Coverage	Setbacks	Garages	Outdoor Living
Maximum 2 Storeys / 8m There are no recession planes in this zone.	Maximum 35% Note: This includes structures that exceed 1m in height from ground level (e.g. entry features, raised decks & balconies)	Front Setback: Minimum 2m Side Setback: Minimum 1m Rear Setback: Minimum 6m Note: Accessory buildings such as garden sheds only require a minimum rear setback of 1m, if less than 3m high and less than 3m long along the rear elevation.	All garages doors facing the street are to be setback 5m minimum from the front boundary. Where a garage is located closer than 5m to the front boundary, and window must be provided in the wall facing the street. Garages are not permitted in the rear yard.	Each site must have a minimum permeable surface area of 50m2
Explanation: Any buildings larger than 2 storeys are not suitable in this sub-zone as they could reduce the amenity to neighbours	Explanation: 2 storey dwellings are encouraged as they are a more efficient use of land then single storey. A max35% site coverage will generally provide a ground floor area of approx. 90-100m2, which includes garage space. To allow more floor area, this restricted site coverage will encourage people to build upwards. This max site coverage will also ensure sufficient land is retained for outdoor living	Explanation: having a large rear setback will ensure there is suitable outdoor living areas that are sunny, private and of a sufficient size to cater for outdoor activities (e.g. 100m2). It will also ensure all dwellings in a row are relatively 'in line', so amenity effects including shading and privacy on adjoining residential properties	Explanation: this standard avoids garage doors becoming the focal point of a house, facilitating a better character and higher amenity streetscape. Ideally no more than 1/3 of the site frontage will be garage door, but to ensure all dwellings can meet required parking dimensions. Additionally, as this provides for more residential floor space and glazing along the street front, the design contributes to CEPTD principles and passive surveillance	Explanation: An outdoor living space of approx. 100m2 is anticipated on each site and facilitated by the rear boundary setback requirement. A minimum area of permeable surface is required for permeability reasons and to provide for lawn and garden space

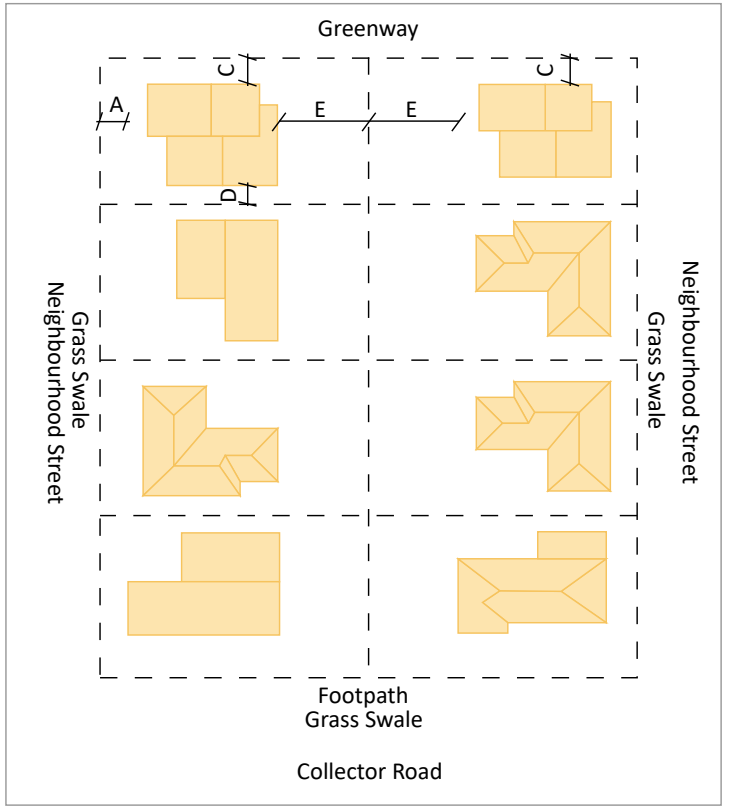


▲ Typical house styles - photos

D6 | Residential ‘C’

Residential ‘C’ areas provide for low density, exclusively residential development. Dwellings will typically be one or two storeys and allow for most housing company products as well as relocatable dwellings (subject to approval).

▲ Typical street elevation

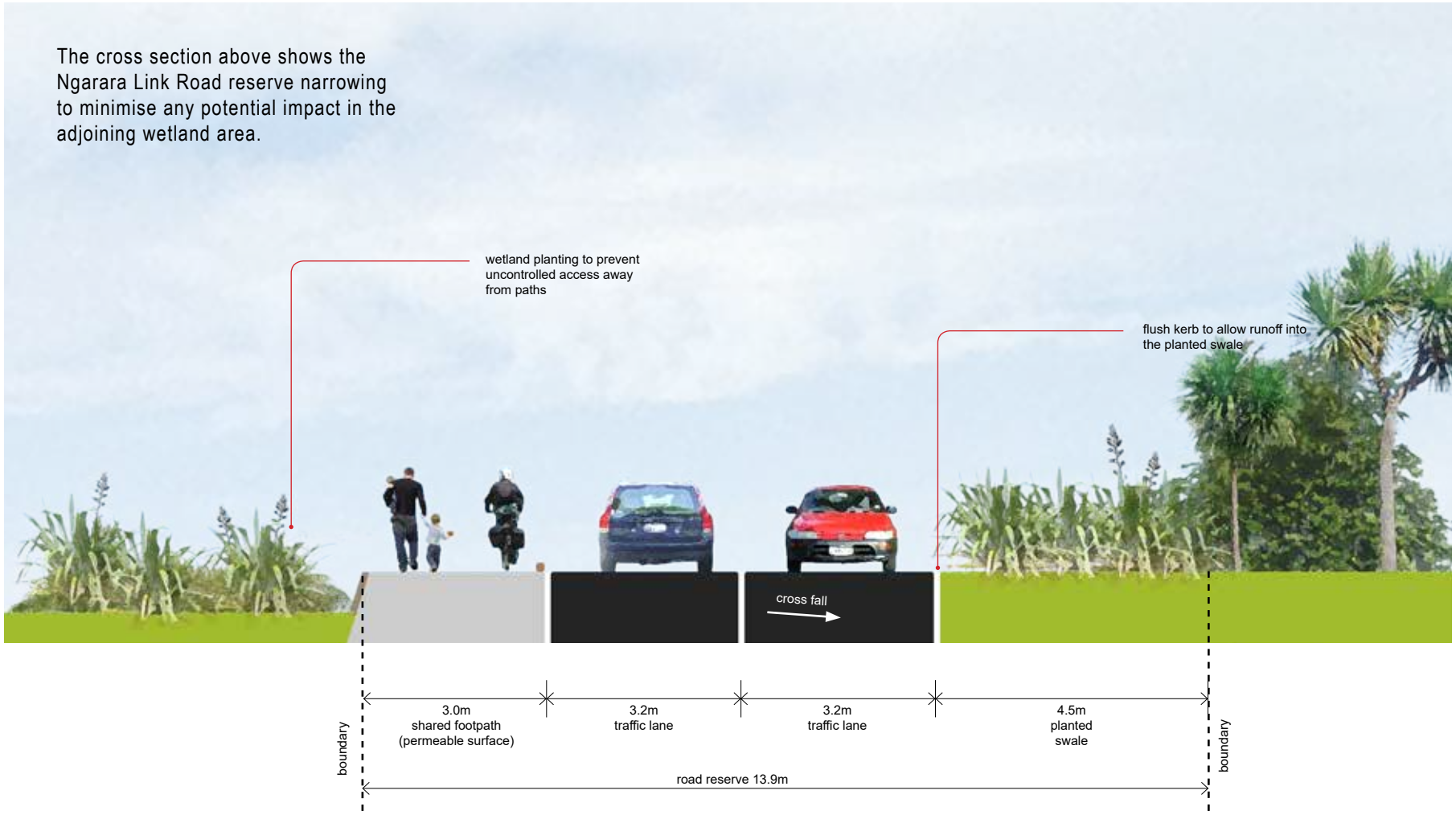


- Front Yard
- Side Street Yard Setback
- Greenway Setback
- Side Yard Setback
- Rear Yard Setback
- Buildable Area
- Lot Line
- Potential Building Footprint

A	Minimum = 3m
B	Minimum = 2m
C	Maximum = 3m, no minimum
D	Minimum = 2m
E	Minimum = 6m

Building Height	Site Coverage	Setbacks	Permeable Surfaces
Maximum 2 Storeys / 8m. In addition, no part of any building shall protrude through a recession line inclined towards the site at an angle of 45° and commencing at 2.5m above ground level at any given point on the site boundary.	Maximum 35% Note: This includes structures that exceed 1m in height from ground level (e.g. entry features, raised decks & balconies)	Front Setback: Minimum 3m Site Setback: Minimum 2m Rear Setback: Minimum 6m Note1: Where there are 2 or more street frontages, the site must have one front setback of min 3m, and one setback (any setback) of min 6m. All other sides shall comply with the side boundary setback requirements. Note 2: Accessory buildings such as garden sheds only require a minimum rear setback of 1m, if less than 3m high and less than 3m long along the rear elevation.	Minimum permeable surface area of 100m2
Explanation: This area has flexibility to contain a mix of single of double storey dwellings As this typology is less uniform then others in terms of building location, there is the potential to generate shading, bulk and dominance effects on neighbours. Building recession planes will prevent these effects	Explanation: A maximum of 35% coverage will ensure there is suitable area retained for outdoor living and landscaping. Enhancing the natural and open character of these areas	Explanation: Some sites are relatively narrow, so the min side setback should not be too onerous or it will restrict the form of buildings. 2m side setback will provide sufficient amenity levels between residential properties. Having a smaller front setback too will increase flexibility on where to put the dwelling and enable having one large outdoor living area, instead of two fragmented outdoor living spaces	Explanation: Due to low site coverage and large rear setback, a minimum outdoor living space requirement is not necessary. However to provide for amenity and private gardens, along with permeable surfaces for stormwater management, each site shall have sufficient permeable land

The cross section above shows the Ngarara Link Road reserve narrowing to minimise any potential impact in the adjoining wetland area.



Street Type A4 – Ngarara Link Road - Adjacent to wetland (13.9m)

0 1 2 3 4 5m

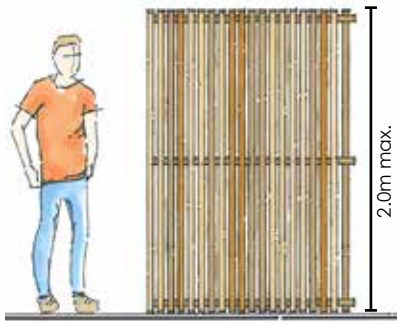
D7 | Fencing

Fencing styles and their placement are designed to maintain an open character in Waimeha while recognising that residents may want to create a secure yard for children and pets or require a degree of privacy for outdoor living areas. There are six different styles of fencing permitted within Waimeha being:

F1A - 2m high vertical slat fences (townhouse/ terraces only allowed shared boundaries)
F1B - 1.6m high vertical slat fences (adjacent to courtyards and to screen bin areas only)
F2A - 1.2m high black pool fence (side and front-side fence only)
F2B - 1.2m/1.25m kiwipanel / euromesh or greenscreen (side fences adjacent to hedges only)
F3 - 1.6m Concrete breeze block wall (adjacent to courtyards and to screen bin areas only)
F4 - 1.2m Solid material fence (same or similar material to the house)

No fencing is permitted in the front yard or forward of the building line of the dwelling in respect of any dwelling (where the building line of the dwelling is 3.0m or more from that boundary). A plan showing the location of fencing is to be provided to the Waimeha Design Panel for approval prior to installation.

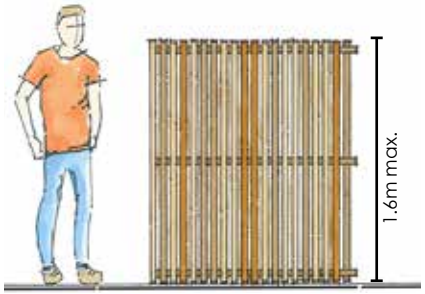
F1A



VERTICLE TIMBER SLAT FENCE

2.0m high (stained colour TBC) - This fence can only be used between adjacent townhouses where a dwelling wall is shared. The slats are to be on both sides, alternatively spaced with 10mm gaps.

F1B



VERTICLE TIMBER SLAT FENCE

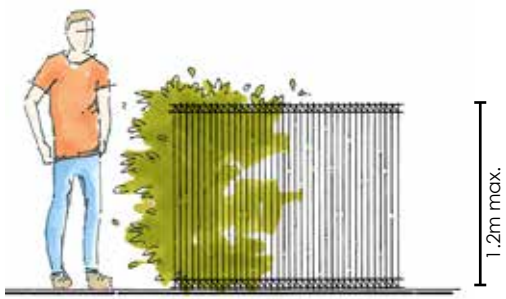
1.6m high (stained colour TBC) - This fence can be used as a front-side fence or the screen bin or courtyard areas.

F2A

STEEL/ALUMINIUM POOL FENCE

1.2m high and coloured black. This fence can be used as a front-side fence.

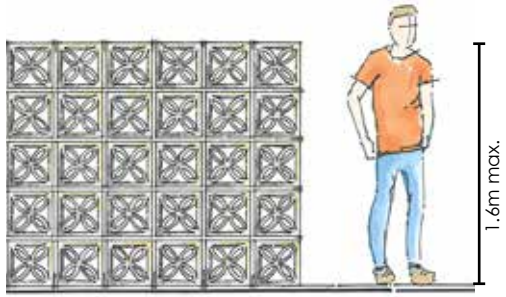
F2B



STEEL/WIRE FENCE

1.2m/1.25m kiwipanel, Euromesh greenscreen or similar. This can be used for side fences only where there is an existing griselinia hedge. An alternative option is for chicken wire to be attached to the post and wire fence to create a secure area for pets.

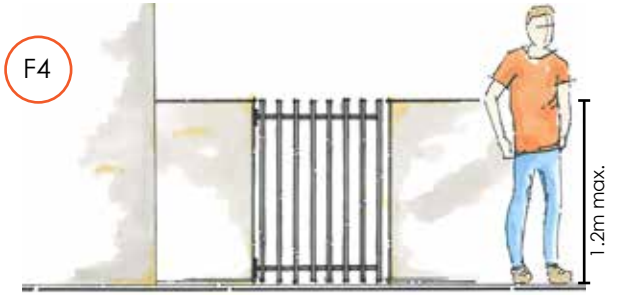
F3



CONCRETE BREEZE BLOCK WALL

1.6m high. This fence type can only be used adjacent to courtyards and within 5m of the dwelling. The length of the wall is to be no longer than 6m.

F4



SOLID WALL

1.2m high and must be the same material as the house. This fence type can be used adjacent to the principle outdoor living space or as front-side fencing immediately adjoining the dwelling. If used as a front-side fence it must include a gate which is visually permeable.