

Section E | Built Form

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E1 | Develop Appropriate Built Forms

The Vision

Ngarara has the potential to offer a diversity of lifestyle choices in terms of accommodation, recreation and some employment opportunities. It has the added benefit of being located close to extensive open spaces, beaches, waterways, surrounding bush and agricultural land. The vision for built form is that all buildings are sensitively designed and well integrated into the existing context so as to contribute positively to each neighbourhood character in terms of form, height, footprint, scale, massing, amenity, external appearance and materials.

Issues

Unlike other enduring aspects of a settlement's structure, built form is likely to change over time. Buildings designed and approved without consideration for the local context, or a clear vision for the future form of the settlement as a whole, result in the following problems:

- Buildings out of scale with the landscape character and the character of the wider built community
- Loss of amenity and development potential on neighboring sites
- Poor quality apartment and open space design
- Loss of commercial and social potential on streets and in local centres
- Degradation of the public spaces through

overshadowing, lack of safety and insufficient ownership

- Unsympathetic architectural styles not suited to their sensitive locations
- Insufficient range of densities that does not support a mixture of house typologies.

Objectives

The objectives for built form within Ngarara need to relate to different coastal and rural settings. However, the common objectives for all built forms within the neighbourhoods are to:

- Provide a mix in different land uses and densities suitable to individual locations within Ngarara
- Be appropriate to their location and use within each neighbourhood
- Be appropriate to their natural settings such as sensitive wetland and dune areas
- Add economic, cultural and visual value to their locations
- Be of high quality construction, design, materials and aesthetics
- Provide well designed, appropriately located and sized private open spaces which serve to minimise urban stormwater run off and that link seamlessly into public open space networks
- Provide a visual focus where identified as a significant public building.

Mechanisms

Guidelines for built form relate to the desired future character of the overall Ngarara settlement and for individual neighbourhoods. It is expected that these overarching urban design principles be used to provide specific built form guidelines and controls for each neighbourhood.

E2 | Land Uses

- A variety of land uses are proposed across the Ngarara Development neighbourhoods and respond to different locations and land topographies within Ngarara
- The range of land uses across the development include: Mixed Use/Educational, Intensive Residential, Residential, Community, Mai-Mai's, Wetlands, Forest and Rural
- Land uses such as mixed use business, intensive residential, educational and residential are more suited to larger neighbourhoods such as Waimeha and Ti Kouka which facilitate a mix in retail and commercial uses and a medium to higher density residential range
- Mai-Mai, Dune, wetland, forest and rural-residential land uses are suited to ecologically sensitive areas that require lower densities and tighter building controls
- Boutique amenity areas provide unique opportunities for a variety of small-scale land uses such as the existing woolshed, craft facilities, cafés, kiosks and small entertainment pavilions.

E3 | Density

- A range of low, medium and high densities are proposed throughout the Ngarara Development, which correspond to specific land uses
- In general, smaller footprint development areas with medium densities are proposed for this development. This approach optimises the use of public transport; promotes better urban form through more pervious surfaces and allows development to work more with the landscape; encourages quality design and care of the public domain and reduces the pressure for development in more sensitive locations
- Higher densities will be implemented closest to the existing Waikanae settlement within Waimeha and Ti Kouka, leaving sensitive dune and wetland areas for lower densities which have less impact on the existing environment
- In more sensitive areas, larger footprint, smaller density neighbourhoods and low Impact architecture will be more appropriate. Residential areas that contain lower densities will have stricter building coverage and planting covenants in order to minimize the visual impact of the development
- In rural areas compact hamlets along the dunes will preserve rural character. When this has not been affected by the expressway.

E4 | Building Heights

- As with densities, building heights will correspond to their respective land uses within the Ngarara settlement
- The appropriateness of building scale within the whole streetscape will be considered, rather than each building as a stand-alone object
- More generous building heights will be more appropriate to higher density urban centres, while heights will be minimized within more sensitive dune and wetland areas so as to not adversely impact visually on dune ecologies and landforms
- Local views and vistas identified will be protected from public places by relating building heights to the slope of the topography and reducing heights to maintain views of the surrounding landscape
- These approaches will result in a hierarchy of built form with lower buildings adjacent to sensitive areas and higher buildings away from them
- Overshadowing of public open spaces will be avoided through use of in-depth sun modelling analyses.

E5 | Coverage and Setbacks

- Coverage guidelines applied to land use areas within neighbourhoods result in optimum open space that can be utilized for private use as well as appropriately massed buildings that are suited to their surroundings
- Buildings will have tighter built footprints and larger setbacks within more sensitive residential areas along dune and wetland areas. This is to reduce the visual impact along dunes and beside natural amenity areas as well as accommodate landscaping revegetated buffers along boundary edges that link into adjacent ecological corridors or that extend along the tops of dunes
- Urban residential and mixed use areas will have more generous built footprints with smaller setbacks that are suited to smaller lots and a higher density living environment. This allows for tighter and stronger built street edges and more compact residential typologies such as apartments and terraces
- Views from public places and along streets will be protected by implementing consistent street setbacks and street-edge configurations and by not placing buildings in view corridors.

E6 | Building Responses

- A key objective of the Ngarara development is to create sensitively sited buildings through the use of appropriate buildings with visual and ecological impact to be consistent throughout the varying building typologies and land uses within this development
- Within urban mixed use and intensive residential areas, streetscapes will be reinforced with well-articulated building masses consistent in scale, proportion and detail. Buildings will be characterised by larger massed buildings commanding a strong built presence on the front street edges with mixed use and active residential uses on ground floor, creating a strong layering of public street space to private rear areas
- Within urban residential areas, houses will be encouraged to create people-scaled local street environments by: creating more solid building masses across two floors; by siting them within close distance to street edges with small courtyard gardens to the front; and by ensuring garages are set back from the main house front façade
- Within lower density residential areas in ecologically sensitive areas, lots will contain stand-alone houses with reduced building footprints that are not visually dominant over the landscape. Buildings will consist of smaller masses that sit individually on slopes, linked through steps, corridors and atria. This allows for

broken-up smaller building masses that reduce the visual and ecological impact on the slope and that allow planting to be integrated into and in-between the built forms, not just around them, merging internal and external spaces.

E7 | Orientation and Solar Gain

- Public Spaces such as parks, domains and more urban courts will be orientated to maximise solar access whilst protecting the area from prevailing winds and rain
- Lot orientation will be responsive to the different solar orientations of the sites. East-West running lots may be wider to allow for sun access from side yards on the north; and north-south running lots may be narrower to allow north sun in from back or front yards
- Designs of all buildings will take sun orientation and wind patterns into consideration, allowing sun penetration to internal living areas; and shielding outdoor areas including balconies from wind and overheating through the use of eaves, awnings, shutters and trees.

E8 | Architectural Character

Within mixed use and intensive residential areas, a robust architectural character will be promoted through the use of:

- predominantly pitched colour-steel sheeting roofs; covered verandas along sidewalks; emphasized entrances; balconies overlooking the main street; strong building layering of heavy base, middle and light top; a mix of solid materials such as solid plastered blockwork and light materials such as weatherboard and modern timber panelling; full height glazed openings on ground floor; timber window and door frames; a palette of muted earth exterior tones with accent colours used only in limited statement buildings along the main street.

Community buildings are similar to those within the mixed use areas and are characterised by a series of connected buildings creating a positive front street edge, while opening to the rear of the property to provide safe private spaces. Additional architectural elements include:

- use of large door openings on the ground floor; sunny courtyard spaces between buildings; and hard landscaped areas incorporating seating, tree planters, steps and paving.

Key architectural elements within residential areas take their cue from more urban forms with a strong street presence. These include:

- Pitched colour-steel sheeting roofs; a mix of light materials such as weather/linear board and

modern timber panelling in conjunction with solid construction such as solid plastered brick or block; use of low-walled small front yard gardens and courtyards that respond to the street edge; use of building elements such as lean-to roofs, verandas, porticos and decks to create external living areas; predominantly natural timber fenestration; and a palette of muted earth tones and natural timber finishes.

Within more ecologically sensitive residential areas such as dunes and wetlands, architectural elements will include:

- Predominantly mono-pitched and lean-to colour-steel sheeting roofs that follow the slopes; use of light materials such as weather/ linear board and modern timber cladding; solid materials such as solid plastered or bagged block or brickwork limited to individual wall elements as opposed to entire buildings; clerestory windows and full height non-reflective glazed windows offering views; use of building elements such as verandas, decks, steps and courtyards to create stepped external living areas; predominantly natural timber fenestration; a palette of muted earth tones and natural timber finishes.

Within more rural areas such as the Rural Hamlets, architectural forms will take their cue from traditional

farming built forms such as barns and sheds including:

- simple-barn masses; double pitch roof lines; walled gable ends; predominantly metal and slate roof sheeting; use of loft spaces; a mixture of masonry and timber wall elements; walls used as external linking elements; small punctured openings and double-volume openings; asymmetrical positioning of windows and doors; shutters; and dormer windows.

Unless otherwise stated within a specific land use, the following architectural features and materials will be avoided in all buildings:

- hipped roofs, very steep roof pitches (e.g. A-frames); excessive use of flat roofs; use of clay, metal or concrete tiles; any form of timber shingles; mono-clad materials; bagged concrete block work; stippled plaster work; faux weathered wall applications; reflective glazing; and large areas of brightly-coloured wall or building element colours.

E9 | Waste Management

- Construction will be planned to minimise on-site waste and loss in energy during construction
- A re-use and recycling management plan will be implemented for the site, to ensure materials are re-used, repaired or recycled; and to prevent recyclables and re-usables from going into land-fill
- On site waste mitigation will be practised
- Eco-materials will be selected and used for all neighbourhoods within the Ngarara Development. This includes consideration of the following: life-cycles; local sourcing, long lasting materials; non toxic contents; renewable sources; those requiring minimum energy input in production and/or maintenance; whole life costs; transport costs; durability; toxicity; renewability; incapacitated energy and maintenance costs
- Buildings will be designed for resource-recovery through the use of non-organic recycling bins, compost areas, and green waste recycling solutions. These will be integrated where feasible in both publicly accessible areas, as well as in mixed use business developments, residential developments and private domestic lots and will be designed as integral parts of a streetscape or building
- Building Designs and development maintenance plans will allow for high quality maintenance and repair rather than replacement.

E10 | Driveways and Parking

- Private car-related uses within all neighbourhoods will be rationalised to minimize their infrastructural impact within the site as outlined below:
- Within mixed use and intensive residential land uses in Waimeha and Ti Kouka, on-grade car related uses will be minimized on street fronts, allowing shared car parking to be sited at the rear of sites accessible from laneways or secondary streets
- Private driveway widths and lengths within residential areas will be reduced by sharing driveways and parking courts between neighbours and by minimising the length of driveway permitted on each site. External semi-permeable parking areas will be favoured over large covered parking garages and extensively paved areas for the long-term external storage of vehicles will not be approved
- Within the most sensitive ecological areas such as Totara Dunes, parking clusters will be situated along the local roads, providing a consolidated parking solution within the neighbourhood in contrast to private on-site parking or garages. This will limit vehicular distance travel within the area and limit the infrastructure impacts of driveways and internal garages
- The design of onsite driveways will minimise grading and excessively steep slopes, tree cutting or other disruption of the site; and will provide a usable width for both pedestrians and cars
- Driveways will be designed without concrete curbs, and surfaced with materials selected to blend the new construction into the surrounding natural environment
- The use of swales and/or other permeable surface materials (e.g. Gobi blocks) on or beside driveways will be encouraged to facilitate storm water management
- In general the design of private on-site parking will be carefully considered as part of the lot design, resulting in parking spaces that do not detract from the streetscape
- Use of car-ports will be encouraged to reduce construction costs compared to enclosed garages and to serve as multi-purpose covered areas.

E11 | External Works

- The primary function of external walls within more urban neighbourhoods will be to help define private and public spaces within a higher intensity living environment. This will be implemented through the use of low steps, porches and landscape planters built as an extension of the building wall edge where setbacks are small; or the use of walls to create front boundary courtyards where setbacks are larger. Where these walls are low, they may consist of solid materials. However, higher walls will be designed to include semipermeable building parts. Long stretches of solid blank walls will be avoided at all times
- Lower density residential lots within natural surrounds such as the wetland or beach areas will not include external walls around property boundaries. This is to ensure that the transition between private lot to public reserve area is visually seamless
- External ambient light levels within private lots will be only permitted for safety reasons and will be low at night to be consistent with rural and natural ambience through the area
- Site utilities will be provided to a point at the edge of the site and will be installed underground. Utility boxes will be located within site boundaries and screened from offsite
- Rubbish bins, outdoor work areas and outside equipment, including satellite dishes and/or gas tanks, will be completely screened from off-site views by the use of architectural features, plant materials, or where feasible, integrated into the form of the building
- In apartments, each unit will be provided with a dedicated enclosed storage space and will be designed with a rubbish storage area or easy access to a communal rubbish collection area
- Within mixed use and intensive residential areas, on site utilities will be accessed from lanes or private courtyards; and not from streets or public pedestrian thoroughfares.

E12 | Sound and Thermal Insulation

- In all buildings, positioning of rooms and exterior spaces will be designed to reduce noise transmission to each other (e.g. In residential buildings, bedrooms will be placed side by side and exterior living spaces shielded from each other)
- Concrete floors on ground floors will be utilised where possible (in particular in larger buildings) to maximise temperature averaging
- Thicker walls, higher insulation requirements and/or heavy materials will be used to regulate temperature.

E13 | Building Signage

- Where building signage is needed, it will complement part of the building aesthetic, colour palette and the range of materials used in the facade
- All signage will not dominate the building facade in terms of size or position
- A limited range of non-bright colours will be used in all signs
- Signage graphics will be as simple as possible, with limited text. They will only include the company/place of interest/street etc. Information such as contact details or branding slogans will be considered inappropriate.



E14 | Appliances and Fittings

- Energy efficient devices will be fitted into all buildings in the initial construction of all buildings. These include (but are not limited to) the following: water efficient shower heads, dual flush toilets; low energy light bulbs; and smart wiring
- The use of solar panels will be encouraged in all residential units. Where solar panels are installed, they will be positioned on roof planes oriented to the north or north west for maximum solar gain; and will be integrated into the roof planes as well as into the overall aesthetic for the house
- The use of outside water taps connected to the KCDC potable water supply will be discouraged within residential lots. Instead, roof water tanks will be encouraged in all residential units. Where roof water collection tanks are provided within residential areas, tanks will be placed underneath the garage or buildings/grounds as required
- Where council-supplied potable water systems are used, a trickle supply device will be installed to each dwelling, to limit the potable water supply per day per dwelling
- Where possible, solar assisted water heating and integrated grey-water systems will be used in conjunction with both Council-provided potable water supply and rainwater collection systems
- A-grade water cylinders will be used in all buildings.