APPENDIX 12Z(i) Amended by Decisions on Submissions

Orewa West **Design Guidelines**

PART 1.0 Structure of Design Guidelines

Part 1.0 describes key elements underpinning Rodney District Council's "Garden Residential" vision for Orewa West. Part 2.0 of the guidelines outlines desired information in a Development Concept Plan (DCP). This optional information is above the minimum requirement listed in the rules. The DCP is the most important part of the guidelines as the road pattern and the size and shape of lots largely determine the character of an area long before the first house is designed. A summary of urban design concepts underpinning the structure plan is included as a guide to preparing a DCP.

Parts 3.0 & 4.0 contain guidelines for streetscapes and site design for residential areas. These two matters are important to create high quality external spaces as part of the Garden Residential concept.

Parts 5.0, 6.0 & 7.0 examine common medium density house types, building elements and visual character. Part 8.0 contain outlines street types.

The guidelines are not to be treated as a checklist for design with every "box requiring ticking". In fact some elements may be contradictory and any design should be assessed against the "body of ideas" contained in the guidelines. Where designs contradict the guidelines then the applicant should outline reasons for doing so.

Some photographs and diagrams contain ticks which indicate a preferable example, or crosses which indicate examples to be avoided.

PART 2.0 Garden Residential Policy Area

Garden Residential is the zoning title to emphasise Rodney District's vision for the Orewa West area. Recent residential development throughout Auckland has been characterized by larger houses being built on smaller sites. This has led to decreased area for planting around houses and dominance of the landscape by buildings. To achieve a Garden Residential neighbourhood the design guidelines focus on four key areas.

The Street & The Public Realm

Open space and major streets in Orewa West are largely the responsibility of Council. Street types have been designed to create memorable spaces for walking, cycling and driving. Street types and services locations have been designed to allow planting of large trees in the road berm. High quality streets and landscaping will go a long way to establishing a garden residential character. Those streets that are "required" by Council are contained in the Rules. Part 8.0 describes the local street type to be constructed by developers.

Indoor/Outdoor Flow

Encouraging residents and developers to landscape their properties is important in creating a Garden Residential suburb. Properties with indoor/outdoor flow from living spaces to terraces encourage outdoor living. If people spend more time outside they are more likely to want attractively landscaped spaces.

Therefore the Design Guide reinforces the Residential rules that encourage lot shape, site planning and architectural design that creates indoor-outdoor flow to exterior living spaces.

A key outcome desired by the rules package is usable outdoor space on sections smaller than 650m². This is the reason for the higher height to boundary rules for smaller sites and when building closer to the road in the 450-649.9m² sites. Encouraging two-storey houses to be built closer to the road and side boundaries allows larger private backyards and better opportunities for exterior living space and landscaping.

Multi Unit Design

Council intends to ensure that multi-unit housing is designed to a high standard and will complement the Garden Residential living environment. Effects on streetscape amenity, pedestrian friendly internal streets and architectural design for multiunit housing are addressed in the guidelines.

Variety

Houses constructed in new subdivisions are frequently built by a few companies and many of the houses look the same. A variety of building types or designs avoids the monotony of repetitive detached or multi-unit housing. In the Resource Consent process building elements are analysed to encourage variety rather than restriction to an architectural style. Houses or apartments with different numbers of bedrooms are encouraged in multi-unit housing so that an area is not dominated by one social or demographic group. This encourages variety so that a neighbourhood does not experience a marked rise and decline as a dominant social or demographic group ages.

PART 3.0 Development Concept Plan

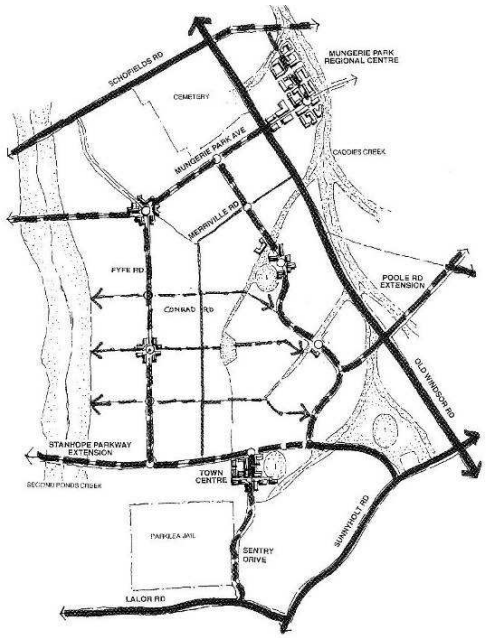

Figure 1: Movement Network

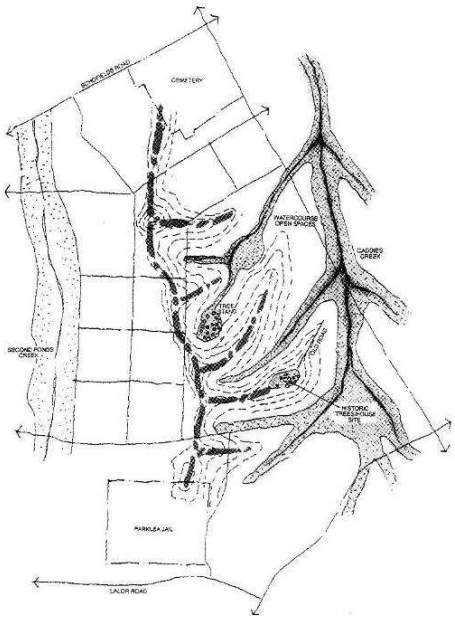

Figure 2: Open Space Network

This section outlines the key urban design issues to be addressed in a Development Concept Plan (DCP) and/or the Subdivision Plan.

A good DCP will show how the opportunities and constraints of the site and context are resolved into a coherent whole. It is preferable that the following layers are isolated as individual drawings then combined into an overall plan.

Existing Site Analysis:

A list of contextual elements e.g. existing contours, landscape & heritage features, significant vistas, environmental features, major roads, walkways, open space and community facilities.

Movement Network:

The DCP must show local roads and the blocks that they create. This shows if a connected street layout is proposed. Pedestrian and cycle links are desirable features to assess movement for all transport modes. The DCP should also indicate connections to existing and likely future roads and paths. It should also indicate which street types are planned in all locations. (Figure 1). Refer to Figure 14 for the Parkway and Figure 15 for the Greenway.

Open Space Network:

This plan must show the location and type of open space, local reserves, wetlands, stormwater ponds, or other devices. Streetscape landscaping, connections to other community facilities, council owned open space and active edges to local reserves will be assessed (Figure 2).

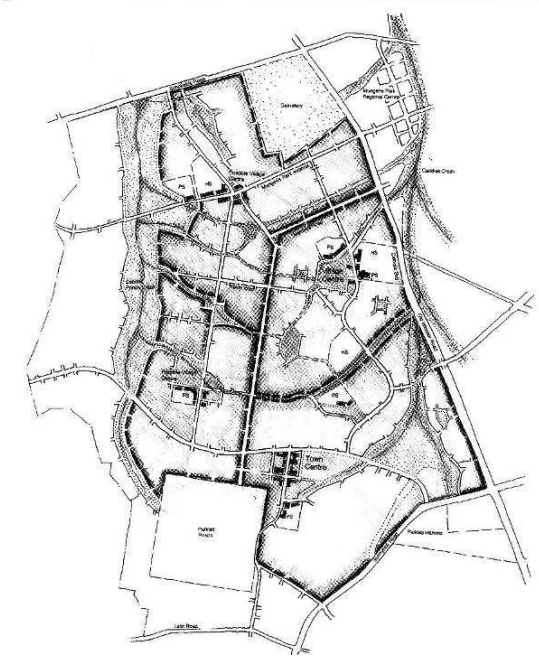

Figure 3: Urban Structure[i]

Urban Structure:

This must show finished contours and location of major retaining walls. Location of various density developments must be shown as described in the rules.

Block dimensions or lot sizes for the zones below 600m² will be useful to assess lot size and orientation more quickly. Location of Comprehensive Development Design (CDD) sites will be assessed against the criteria in Part 4 (Figure 3).

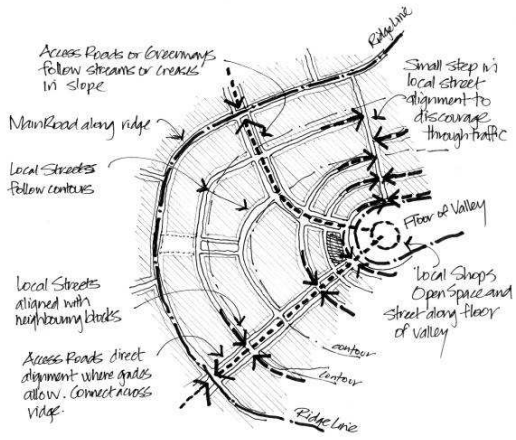

Figure 4: Topography influence on Urban Structure

Existing Topography

Orewa West's steep, rolling topography may not be conducive to a square grid street pattern that is typical of connected street networks. Additionally, streets that minimize earthworks will probably follow the contours so will have curving alignments.

The curving streets can run along the contour lines as long as they connect into streets that run up the slopes at regular intervals. So although the block shapes are different and the block sizes are larger, this type of layout is likely to be connected and minimizes earthworks (Figure 4).

The streets running up the slopes should also follow sub-ridges or creases in the slopes to minimise earthworks. Otherwise they should be as straight as possible to allow for legibility of the street network. Streets that arbitrarily curve up the slope will be disorienting when used in conjunction with the streets that run along the contour lines.

Urban Design Concepts

The key urban design concepts underpinning the Outline Plan are outlined here to assist in the preparation of Development Concept Plans.

Figure 5: Landform Context.

Landform

Ridges and valleys are the dominant landscape form in Orewa West (Figure 5). The existing ridge roads are maintained and extended forming a top edge to each valley. Streams sit at the centre of each of these valleys and provide logical green open space networks.

Neighbourhood Structure

The steep topography of the area forms a natural 'neighbourhood' structure in Orewa West. The pattern of roads which tend to run along the top and bottom of the valleys reinforce these natural neighbourhood boundaries.

The larger streets border and define each neighbourhood. They also direct vehicles away from the quieter centre of the neighbourhoods.

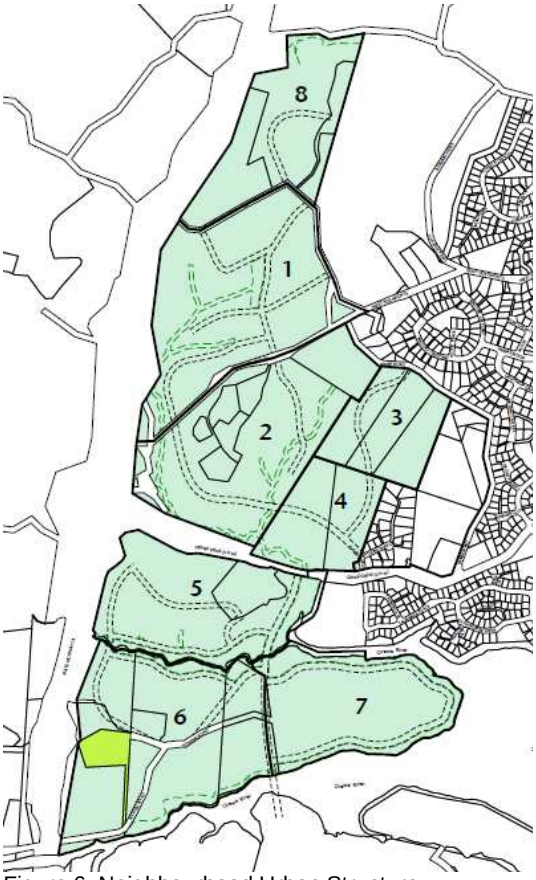

Figure 6: Neighbourhood Urban Structure

Lot Orientation – Detached Housing

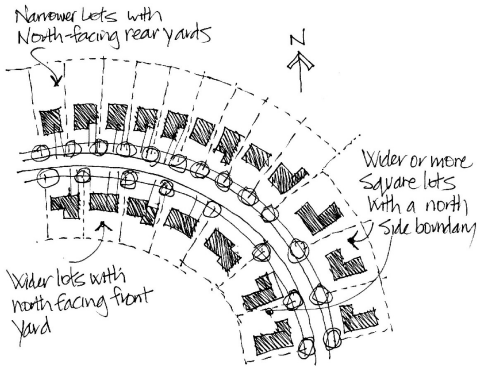

Figure 7: Lot Orientation in curving streets

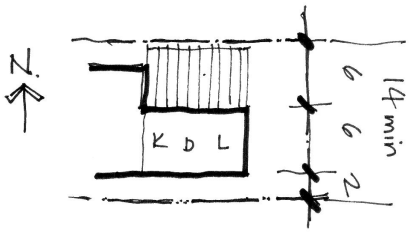

Figure 8: North facing side yard

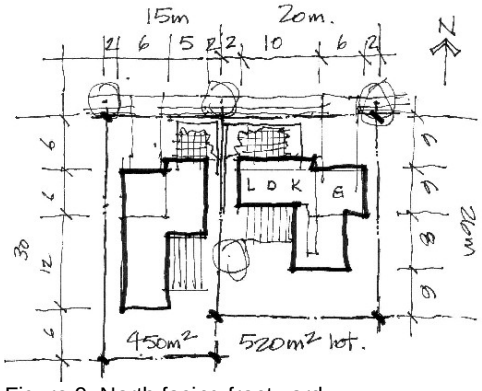

Figure 9: North facing front yard

Individual lot boundaries are not required in a DCP, but drawing the individual lots will show if they are sized and shaped to allow indoor/outdoor flow and landscaping. Therefore applicants are encouraged to show individual lots for sites smaller than 649.9m². The objective is to encourage lots that are shaped to allow a sunny outdoor living space (Figure 7). The curving streets in Orewa West will have lots with varying orientation on the same street.

For detached houses lots with north facing rear yards can be narrower as the living spaces can be located along the back of the house.

Lots with north facing side yards should be wider than 14 metres to allow for living spaces and a minimum 6-metre wide outdoor space. (Figure 8).

A 15 metre wide site should be the minimum to allow for double garaging, side yards and outdoor terrace connected to a living space. A 20 metre wide site will allow the kitchen, dining and living spaces to open to both the front yard and back yard (Figure 9).

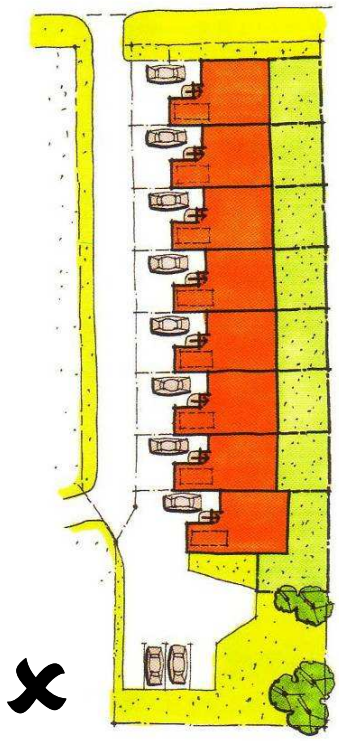

Figure 11: Bad example of multi-unit housing

Comprehensive Sites

Drawing internal public streets and site dimensions are desirable to access Comprehensive Development areas in a DCP. For example the narrow site in Figure 11 has poor internal amenity and street frontage. The internal access has a fence down one side and is dominated by garages on the other. Refer to Part 4.0 for further discussion. Comprehensive Development sites should be wider than 38 metres to allow for two sites (15 metres minimum depth each) facing each other across an 18 metre wide street. Any Comprehensive Design site deeper than 30 metres from a road frontage will have rear lots and therefore must indicate the street layout as part of the DCP application. House fronts should face house fronts, not back fences.

Whilst it is not necessary to show individual lots, the depth of the sections along a street is useful to assess if the proposal is minimizing earthworks and creating a good street pattern. Retaining walls are likely in Orewa West because of the steep topography and it is preferable that they occur on back-to-back rear boundaries.
Therefore cross sections are also desirable to show the extent of earthworks, batters or retaining walls especially along back or front boundaries as shown in Figure 12.

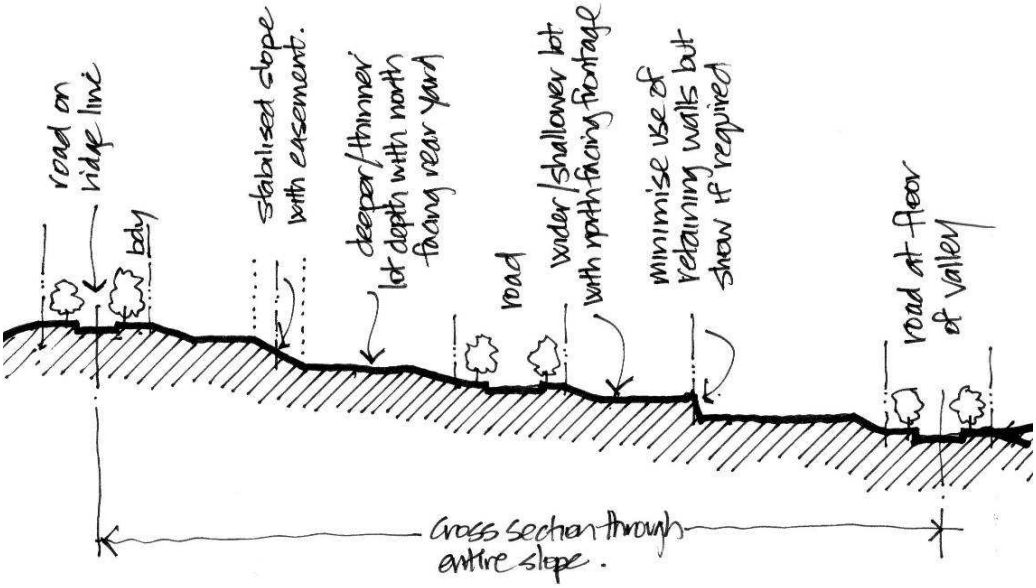

Figure 12: Cross Section from ridge to floor of valley showing proposed roads and earthworks at boundaries.

PART 4.0 Residential Streetscape

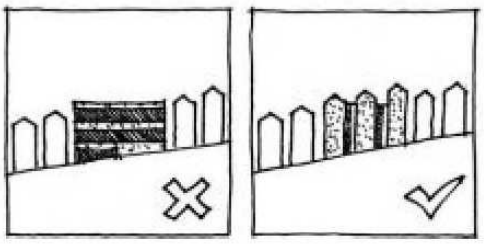

Figure 13

The streetscape is more than the road reserve; it stretches from building to building and creates neighbourhood character and a shared "public realm". It is important that streets are pleasant and conducive to walking and cycling. The street types in the Rules must be adhered to as they establish services berms that leave the edge berm free for tree planting.

Figure 14

House frontages are important to creating street character. The depth of front yards and building height defines the enclosure or openness of the street. The position of buildings relative to side boundaries creates a visual rhythm for the street. (Figure 13).

Figure 15

Cross sections are requested for the DCP to determine where retaining walls are to be located. Locating retaining walls on rear boundaries avoids examples such as Figures 14 & 15, which offer little visual interest and amenity for the street.

Buildings in Comprehensive Developments must face and align with

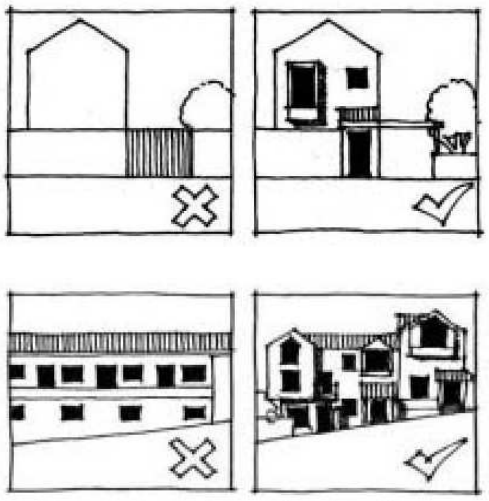

Figure 16[ii]

public streets (including new internal streets). Front doors must be accessed from streets with defined carriageways, planted berms and footpaths. Refer Figure 30 for an internal driveway that will not be acceptable. The local road type identified in the Rules is one acceptable solution with variations to be approved. Multi-unit housing is not to be accessed from roads with no footpaths. The scale of Comprehensive Developments must respond to the character and scale of the garden residential housing context.

Expressing individual houses vertically or adding secondary elements for apartments can address scale issues. Blank walls or banks of garages facing the street should be avoided. (Figure 16).

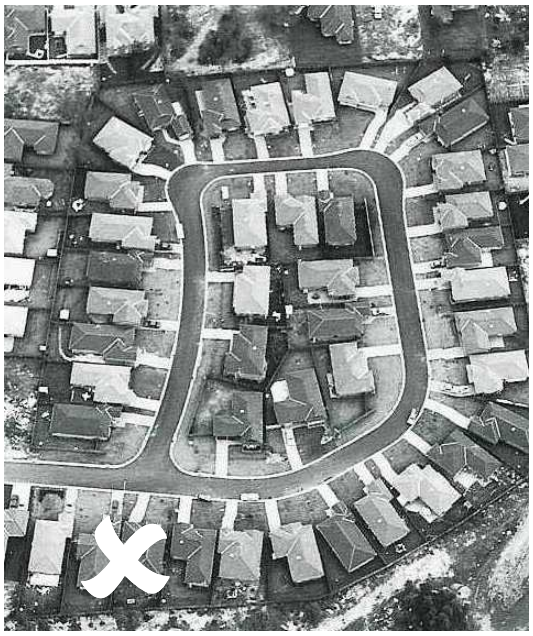

Figure 17: Large front yards at the expense of usable backyards.

Figure 18: 6m front yard on 550m² site

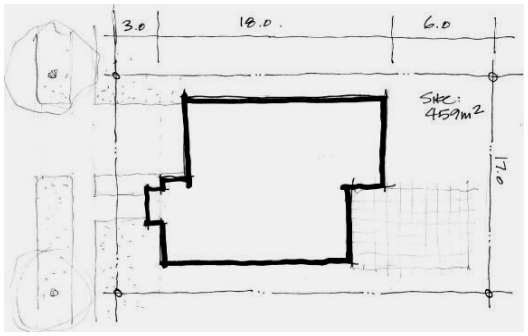

Figure 19

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

Front yard setbacks derived from low-density rules are frequently misapplied to smaller lots, severely compromising space in the backyards and privacy (Figure 17). Large setbacks and sweeping front lawns can create the illusion of a grander house (Figure 18), 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.[iii]

The house in Figure 18 has a 6 metre front yard in addition to the street berm. The 6-metre front yard is excessive if it compromises the liveability of the backyard.

Lots should be deeper and narrower rather than wider and shallower to achieve better exterior private space. For detached housing, lots shallower than 27 metres will be difficult to plan with a 6 metre deep backyard (Figure 19).

Detached Housing

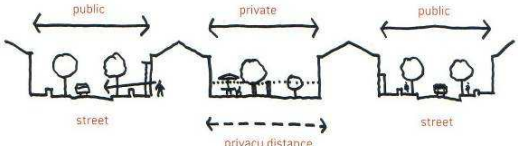

Figure 20: Backyards for detached housing

Site planning for detached housing is largely concerned with the creation of usable private outdoor space. The backyard becomes more important than a front yard on smaller sites. Backyards should adjoin backyard to enhance private space for neighbours (Figure 20).

Figure 21

The houses in Figure 21 are on sections smaller than 450m² yet still have 7 metre deep backyards. This is achieved by smaller front yards of 3 metres and higher height to boundary rules for the side boundary at the front of the site.

Figure 22

Two storey houses built closer to the street front is a desired outcome to increase backyard space (Figure 22). This is why the height to boundary rule is higher for the front 14 metres of 450-649.9m² sites. Figure 23 is a view of the back yard in the same development.

Figure 23

Figure 24

All the sites in this Botany Downs street (Figure 24) are in the 300-450m² range. The two storey houses on the right have a reasonable size back yard of 6-metres deep (Figure 25).

Figure 25

But the single level homes on the opposite side of the street cover the site so that there is little side yard (Figure 26) or rear yard. Figure 27 is a photograph looking over the rear fences of the same houses giving an impression of the backyard (or lack of).

These examples show that market forces do not determine whether a single or two level home is a better option on smaller sites.

Figure 26: Side yard of single level homes

Therefore the rules for Orewa West encourage two storey homes on smaller sites by varying height to boundary planes at the front of the site and maintaining private open space requirements on the smaller lot sizes. The effective higher percentage of rear yard required will encourage two-level development.

Figure 27: Rear yard of single level homes

Figure 29: Housing not facing a public street

Figure 30: Housing with good street frontage

Multi Unit Housing: Comprehensive Development Sites

Higher density housing often fills the most awkward sites left over after subdivision – commonly land locked sites in deep blocks with limited site access. Avoid dwellings that have an internal address to a driveway (Figure 29).

Higher density housing should be located around special places of amenity including parks, neighbourhood centres and public transport routes (Figure 30). This gives people without big gardens a pleasant outlook and proximity to open space. It also provides passive surveillance over public spaces. Each house or apartment should have a front door to the street and a street address.[iv]

There are no fixed zones for comprehensive developments within the Orewa West Structure Plan. The only control on locating Comprehensive Developments is the table in Rule 12.8.22.11.1.2.

This sets a percentage range of higher density housing within any single precinct. This approach encourages higher density housing to be spread throughout the area, and to create variety in housing form and neighbourhood appearance.

Generally comprehensive developments should be located close to open space, to the town centre and to likely bus routes. This allows the dweller to utilise public open space and public transport to offset any loss of private amenity.

Figure 31

Figure 32: Rear vehicle access

Figure 33: Shared open space linking front doors in terraced housing development

Figure 34: Small courtyards for garaging

Figure 35: Garage mews for terraced housing.

Garages

With terraced houses planning for cars requires careful consideration. Mixing of cars and pedestrians in a normal street type is encouraged. However Rule 12.8.22.11.8.6 stops garage doors from occupying more than 35% of the area of a building's front elevation.
Therefore a typical 13m² double garage door requires a 37m² front elevation area.

The intention is to stop developments such as Figure 31 that have blank fronts with only doors at ground level.

Narrower sites in Comprehensive Developments may require rear vehicle access (Figure 33) with either streets or open space linking front access (Figure 32).

Design for the rear vehicle lanes is also important. They should not be too long and be designed with pedestrian safety in mind. Creating turning courts offsets the garage doors from the driveway reducing their impact when looking from the street (Figure 34). A smaller offset along a driveway and changing the rooflines or materials can also improve their appearance (Figure 35).

PART 6.0 Housing Types

Detached Housing

Figure 36

Conventional height to boundary rules of 2.5-3.0 metres + 45º combined with larger houses on small sites has led to rows of “pop-top” houses as they build up to the allowable envelope (Figure 36). It is a house form encouraged by development rules more suited to larger sites. There is nothing inherently wrong with this house but existing rules encourage mass repetition of this solution. Imaginative planning rules encourage variety of housing forms.

Figure 37

When the height to boundary rules are adjusted to suit different size sites different building types become possible. The 5m + 45º height plane for the first 14 metres of the 450-649.9m² sites is intended to encourage a variety of two storied houses. Figure 37 is a home on a 350m² site. The house has a stronger two-storey form and gabled roof. However the pop-top house is still possible under this rule, so a variety of houses are still possible.

Figure 38

Allowing an increased height to boundary for the front 14 metres will allow larger backyards. Figure 38 is the rear yard to the house above on a 350m² site.

Figure 39

The house from Figure 36 is located in the street to the left. An unrelenting row of any house type creates an uninteresting streetscape (Figure 39). Yet on the opposite side of the street a variety of houses create a far more interesting streetscape (Figure 40). All sites in the street are in the 450-550m² size range.

Figure 40

Figure 41

Corner Sites & Houses

Corner sites are important in establishing character in an area and entrances to streets. Corner sites should be as large as possible to allow private open space and good designs. The house in Figure 41 is on a 550-650m² site.

Comprehensive Developments

Multi-unit or multi-site developments should include a variety of housing types so that various households, including older people, single people and families can form a genuine community. Different housing types will lead to a variety of building forms and avoid the monotony of tract suburbs.[v]

Perimeter block developments (multi unit developments that extend around all the frontages of a small block or significant part of a block) are one good solution for comprehensive developments. They maintain street edges and can enclose generous communal courts.[vi]

Balconies

Balconies become important in higher density housing. They should offer privacy and shelter from wind so cantilevered balconies with balustrade height surrounds are discouraged. Recessed balconies or cantilevered balconies with side walls are preferred.

Front Doors

Gardens to the side of the front path can be screened for privacy but front doors should be visible to provide security for visitors and residents returning at night.

Recessed entries, projecting porches and entrance canopies porches are useful elements to avoid unwelcoming entries (Figure 42).

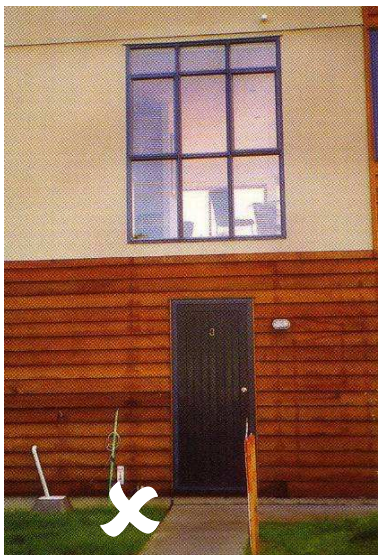

Figure 42: Bad example front door design.

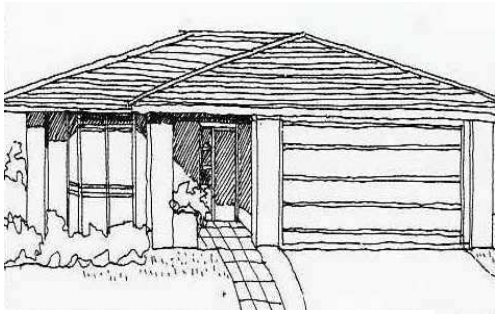

Figure 43

Garage Doors

Garages that project in front of the house proper dominate the streetscape and create unfriendly places. Double garages on narrower lots exaggerate this effect. Double garages can also dominate single storey houses with shallow pitch hipped roofs. A developer of a number of detached houses in a street must seek to avoid these problems by recessing the garage doors, placing garages below second levels, or varying roof lines above the garage.

In townhouses or narrow lot housing rear or side access to garages removes garage doors from the street elevation. Rear access garages from lanes or car courts for cluster houses are preferred for multi unit developments.[vii]

Figure 44

Figure 45

Figure 46: Terraced housing roofs and materials

Detached Housing: Variety

No more than three detached houses in a row can use essentially the same plan, building shape and materials.

Even well designed houses with no differentiation create a mundane streetscape and living environment Figure 44 has a number of well-planned houses and streetscape, but the repetitious shapes and materials lead to a mundane streetscape.

Figure 45 is the second stage of the same development and a variety of building shapes and materials have been used. The result is a more interesting streetscape.

Breaking up Building Mass

Terraced houses should be expressed as individual entities to reduce the scale of the whole block. Material changes and individual roofs are used in Figure 50 to achieve this. Compare with the one finish used in Figure 47.

This design in Figure 46 also uses recessive and projecting elements to break up long flat elevations. The secondary elements use different materials and colour to articulate entries, balconies etc.

Multi-Unit Housing

Figure 47

Division of the façade into a base, middle and top sections breaks down the scale of multi-unit housing. Monolithic claddings of one finish are discouraged especially for multi-unit housing. Terraced housing involves the repetition of similar plans and the building appearance will include some degree of repetition.

Figure 48

Successful design balances the repetition with varying secondary elements such as the bay windows in Figure 48. Figure 49 uses gable roof forms to define each terraced house and break down the development's scale.

Figure 49[viii]

The flat roofs project forward to break down the front elevation's scale and provide privacy for the balconies. Both figures 49 & 50 have individual gabled roofs, changes in materials and projecting elements but Figure 50 looks more repetitious. This shows how all elements must be carefully combined in multi unit housing. Figure 50 has changing materials but the front face is flat and uninteresting.

Figure 50

Figure 51 has projecting elements but they only emphasise the garage door. The materials have no variation. Overly complicated forms can remove any human scale in terraced housing and make a development seem denser (Figure 52).

Figure 51

The long line of terraced houses running up a slope is another negative element in Figures 50 & Figure 51. This is the reason for the rule limiting the length of terraced houses to five units or 40 metres.

Figure 52

Blocks of terraced houses should run along contours, and the space between blocks should contain a street or open space. The end units should be designed to take advantage of the free end wall with windows and changes in materials or shapes.

Scale

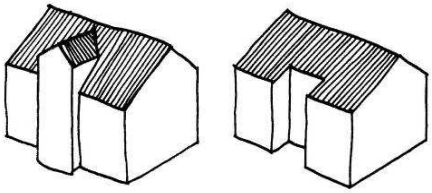

Figure 53[ix]

Projecting or recessive secondary elements can be used to break down the scale of a larger block. Roofs of each unit can be expressed in terraced housing, or the secondary projecting gable hides the long connecting ridge (Figure 53).

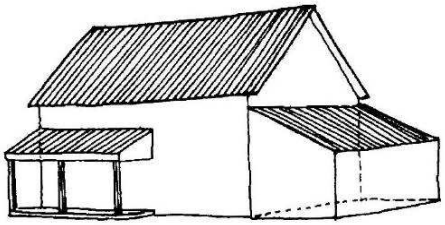

Figure 54

Additive forms to can reduce the scale of a larger block (Figure 54). A cluster of roofs reduces the scale of a larger building if it neighbours smaller scale detached housing (Figure 55). The simple volume in Figure 56 retains its size even with the recessive areas cut out of the larger volume.

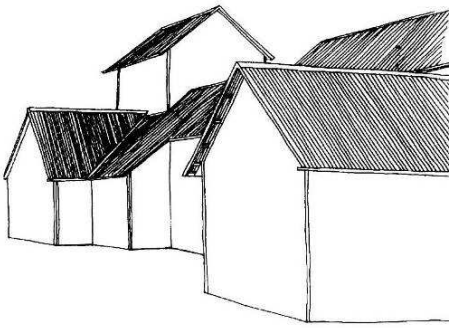

Figure 55

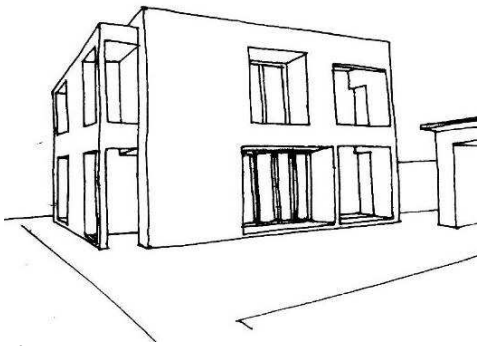

Figure 56

PART 9.0 Benchmarked Documents

- Silverdale North Design Guidelines: Appendix 12P – Rodney District Council.
- Good Solutions Guide for Residential Developments – North Shore City Council, 2001.
- The Residential Design Guide for Developments in Residential Zones in Specified Growth Areas – Auckland City Council.
- Design Assessment Criteria, Plan Modification 1 for the Victoria Quarter – Auckland City Council.
- New Housing in Living 3 Zones; A Design Guide – Christchurch City Council.
- New Housing in Living 4 Zones; A Design Guide – Christchurch City Council.
- Large Buildings in lower density living zones; A Design Guide – Christchurch City Council.
- Victorian Code for Residential Development
- The Good Design Guide for Medium Density Housing, Department of Planning & Development, Victoria.
- Better Urban Living, NSW Department of Planning & Natural Resources, 2000.
- Residential Subdivision, NSW Department of Planning & Natural Resources, 2000.
- Thorndon Character Area Design Guide – Wellington City Council
- Newtown Character Area Design Guide – Wellington City Council
- Multi-Unit Development Design Guide – Wellington City Council

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i DUAP sketch
ii Sketch from Multi Unit Design Guide, Wellington City Council
iii UDAS Residential Subdivisions, pages 58 & 59
iv UDAS Residential Subdivisions, page 41
v UDAS Residential Subdivisions, page 4.
vi UDAS Better Urban Living, page 24
vii UDAS Residential Subdivisions, pages 52 & 53
viii Photograph courtesy Fulton Hogan & Chris Prebble Architect.
ix Figures 55-58 taken from Christchurch City Design Guides.

APPENDIX 12Z(i)

Special 33 – Orewa west road Cross Sections