



DESIGNER OFFERS ALTERNATIVE TO URBAN SPRAWL

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A workshop session led by Melbourne urban designer Wendy Morris, in which groups designed neighbourhoods for a greenfields site, brought a stimulating perspective to the New Zealand planning scene.

Australian urban designer Wendy Morris visited New Zealand in December 1993. She presented her views on urban design at forums in Auckland and Wellington, and led a design workshop on December 4 in North Shore City. This focused on ways of achieving innovative and sustainable development, for an area just to the north of the proposed Albany Centre.

Morris, like Kaufman and Murrain

(1992), believes that good suburbs should display three characteristics: permeability, variety and legibility. A settlement which is permeable contains street networks which are interconnected, and destinations which are accessible from many directions. Dead-end roads and those which meander arbitrarily are kept to a minimum.

Variety relates to the range of uses which are compatible with residential areas,

ie different housing, building forms and small-scale shopping.

Legibility is the ease with which people are able to interpret visual clues to find their way around. This is achieved by developing a "sense of place", reinforced by views or vistas of landmarks or focal points (natural or person-made) and blocked vistas to create visual interest.

TRADITIONAL NEIGHBOURHOOD DEVELOPMENT

Wendy Morris's presentations are typical of many of the initiatives from Victoria, Australia, in that they reflect a strong anti-suburban bias. Suburban sprawl is said to waste land and natural resources and cause traffic congestion and air pollution. It ▶

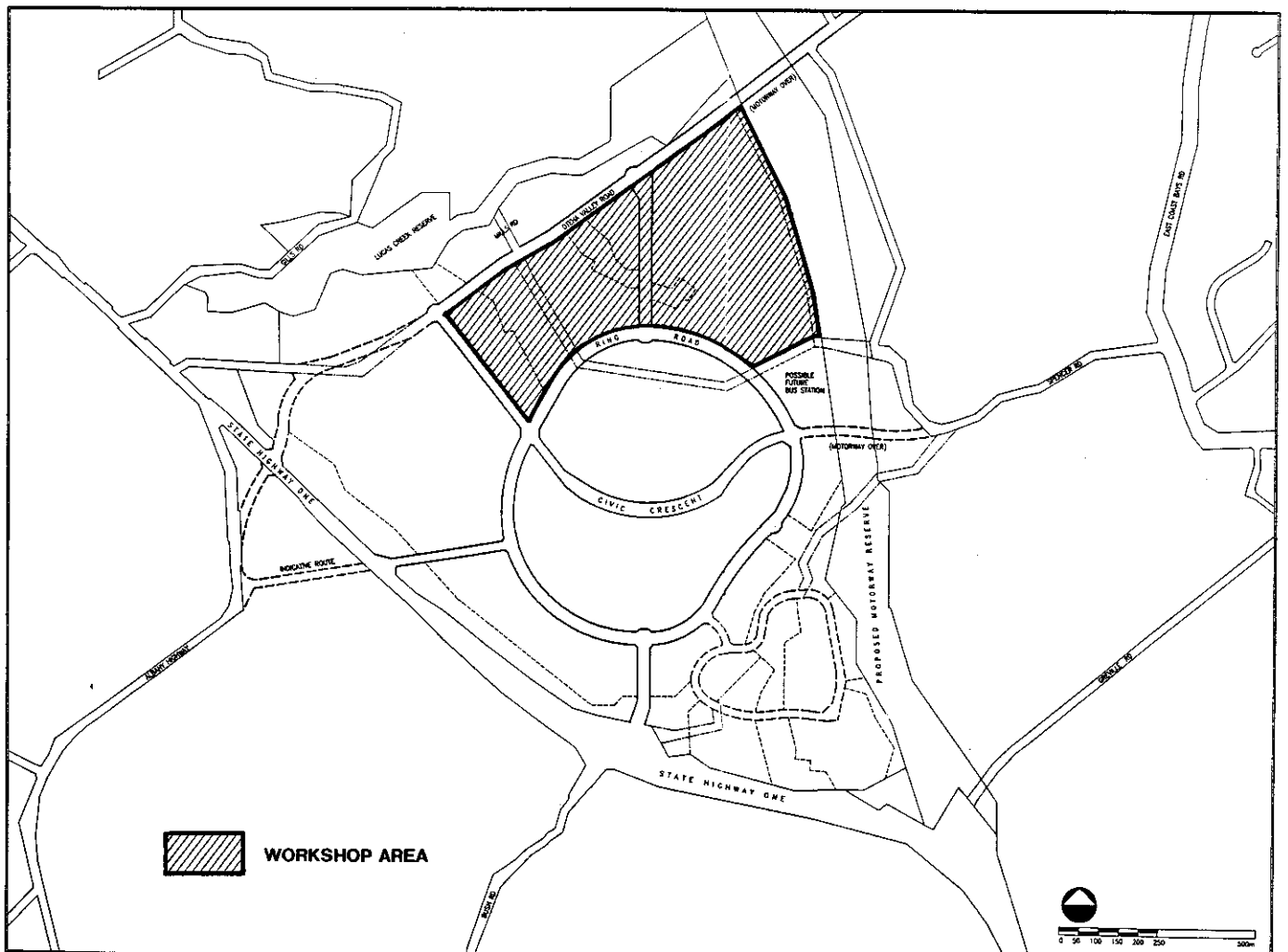
At Wendy Morris's urban design workshop, a group considers the design and layout for its piece of town.

◀ requires costly infrastructure and encourages residential segregation of income levels. It also increases house prices, and increases dependence on the car as the main means of transport.

An alternative model is that of traditional neighbourhood development. This model is found worldwide, has existed since the beginning of urban settlements and has withstood the test of time. Traditional neighbourhood development generally has the following characteristics.

- a limited range of commercial facilities (for example, general store or cafe along with postal facilities) no more than a five-minute walk from any house, ie a 400-metre radius;
- land uses are mixed in close proximity, including housing types, shops, and workplaces to make walking convenient and to minimise vehicular use;
- streets are laid out to provide maximum "connectivity" (the use of culs-de-sac is

Map (courtesy Glenn Cockerton) and photograph show the workshop area in relation to the proposed Albany sub-regional centre.



avoided) and to encourage pedestrian use;

- housing is clustered to foster a sense of community, focal points are created around the town centres, and a consistent and appropriate architectural style is provided.

These ideas are not new, but what is new is the way they are combined in a package with the purpose of creating sustainable communities.

DESIGN WORKSHOP

The design workshop was attended by some 25 people, the majority of whom were planners. However, other professions represented included surveyors, developers, and urban designers. The subject of the workshop was a 30 hectare greenfield site between Oteha Valley Road and McClymonts Road, Albany. It is situated to the north of the proposed Regional Commercial Centre (*Planning Quarterly*, 112, Dec 1993, pp12-14). The site was selected to illustrate an alternative to suburban sprawl. This was a theoretical exercise, having no influence over current development policies for the land.

The participants were divided into four groups, arranged to comprise people with varying professional backgrounds and expertise. This was beneficial, since people were able to share their knowledge and experience, enhancing the groups' skill base.

After a series of introductory presentations, the groups were taken on an inspection to familiarise themselves with the site. Two design sessions then were held to facilitate the preparation of designs for the site.

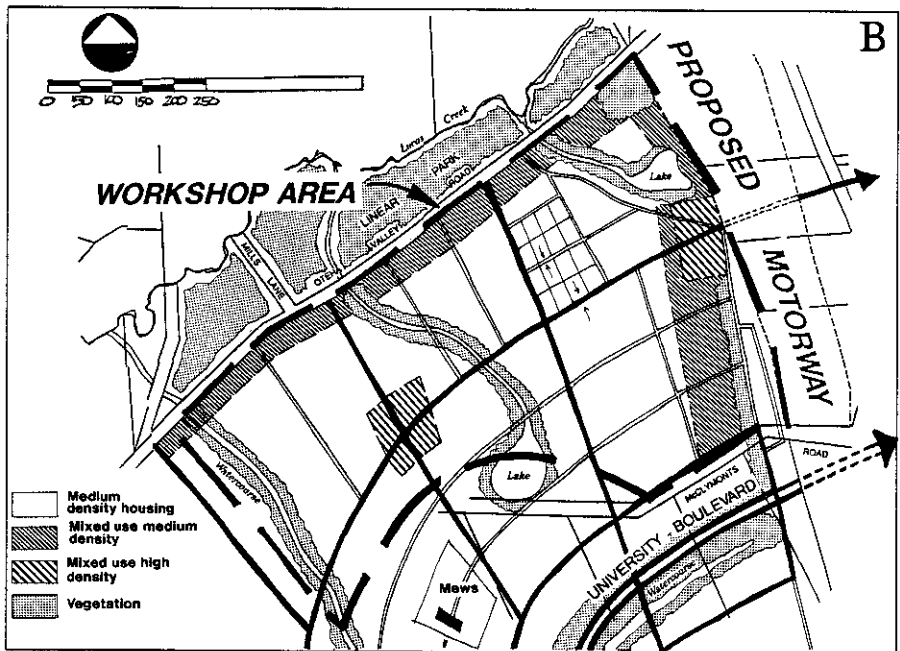
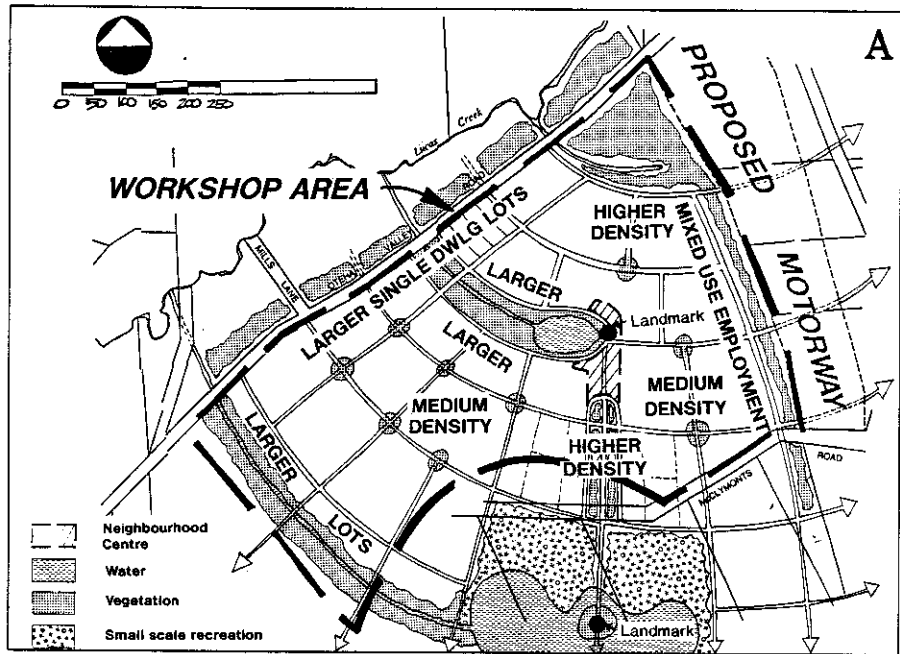
Design Session 1

The groups had one-and-a-half hours to complete Design Session 1. This involved producing a Regional Context Plan and starting to consider community design elements.

It comprised two design steps, which were:

- to consider the site's regional context and how it might be integrated into the existing fabric;
- to draw a number of circles side by side with a 400-metre radius on a site plan. This served to illustrate the form the settlement might take. These were used to create a number of possible neighbourhoods based upon a five-minute walk to each centre.

Wendy Morris believes four neighbourhoods could then be joined together to form a town, housing approximately 10,000 people at a density of around 15 dwellings per hectare. This population would be able to support a range of services such as a small supermarket, shops, workplaces, and two primary schools.



Above and overleaf: Diagrams of the initial concepts prepared by the four groups after completing Design Session 1 and part of Design Session 2.

Design Session 2

The groups were given three hours to complete Design Session 2, which required the preparation of a site plan. This displayed a detailed road network, emphasising existing and potential connections to adjacent areas, whilst providing good connectivity for both pedestrians and vehicles within the site.

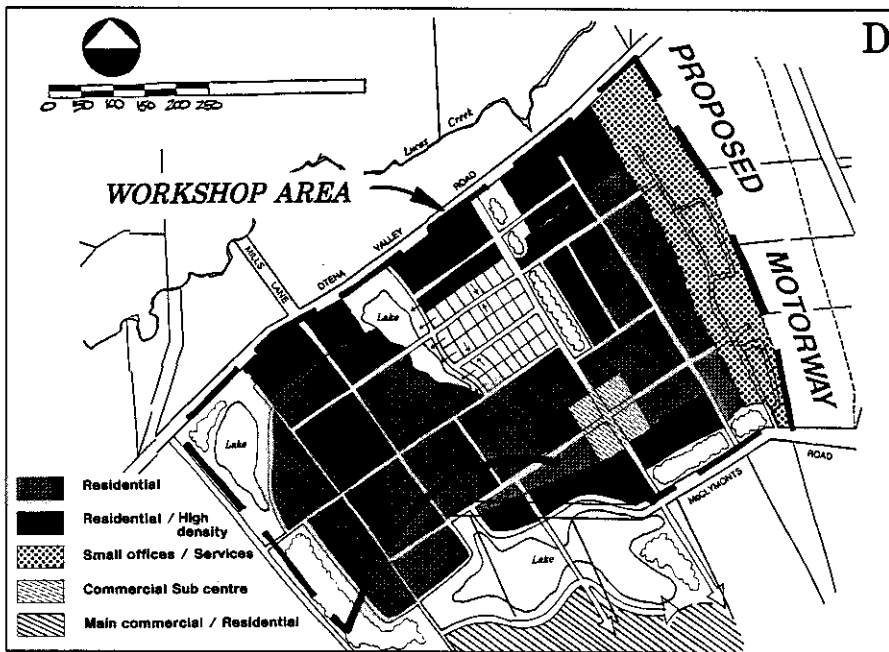
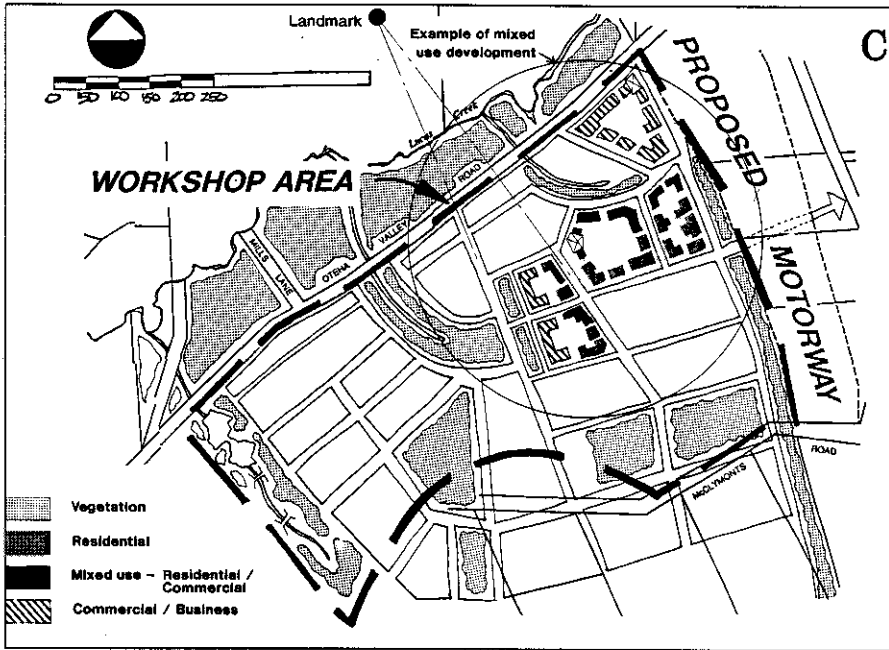
This network was redrawn onto a 1:1000 scale plan. The road network was adjusted to take advantage of topography, site views and lot orientation. A legible

structure was developed by fine-tuning road widths and junctions to provide appropriate traffic management.

A range of land use types and development densities was considered: residential densities, open space networks and drainage reserves. Open spaces were designed to form green networks to aid direction finding. Lots were sited to face onto water and/or vegetation and open space.

A portion of the site was developed in greater detail to show road configurations, lot dimensions, building and parking envelopes.

Each group then reported back to the workshop. This was an opportunity for participants to review, discuss and learn from each plan.



SITE CONCEPTS

After completing Design Sessions 1 and 2, the four groups each prepared a concept for the site. The concepts were developed from a similar starting point: an appraisal of the natural features, such as orientation, topography, natural water courses, direction of the prevailing wind and significant areas of vegetation. The location of existing and proposed road networks also formed part of this analysis. The groups also looked for existing landmarks and then devised ways in which they could be included in their designs.

The concepts which the groups devised, whilst comprising different layouts, also incorporated similar features, including: a variety of residential densities, a mixture of

land uses, a connected roading network focusing on commercial cores (within a 400-metre radius) and networks of open space of existing and proposed vegetative/landscaping features.

The movement network reinforced the idea of legibility. Roads were designed to give vistas of landscaping, water, topographical features and notable buildings. Landscaping and buildings were used to terminate vistas, to add interest and to provide visual cues for those moving within the site.

The road networks were designed to allow blocks of buildings to be orientated to maximise solar gain. They were also arranged to enable development to have a clearly-defined public front and a private

back. This allowed similar development forms to either front or back onto one another. The four concepts illustrated here outline the major building blocks which could then be broken down further by small neighbourhood roads and pedestrian paths. It was advantageous to design blocks to face onto open space, landscaping, a water course or small lake for amenity and commercial reasons.

Overall, the day illustrated how the workshop process could be used and implemented when planning for future development. In this instance it was to be given the theory and then the opportunity to put this newly-acquired knowledge into practice. The workshop also enabled people to test and try new ideas, something which is not always possible in the workplace. The design concepts also showed how new sustainable communities could be developed, particularly in the urban fringe.

CONCLUSIONS AND IMPLICATIONS

Wendy Morris brought a stimulating perspective to the New Zealand planning scene and was able to challenge current design concepts. Sustainable communities are currently being designed in Victoria. If a similar technique were adopted in New Zealand, similar benefits could be gained.

When designing and developing greenfield sites, it is particularly important to consider issues of permeability, variety and legibility. New urban areas should incorporate road networks which provide maximum linkages with desired destinations and which encourage pedestrian use. All residential areas should be provided with good access to a wide range of activities. It is important to design a settlement which has a "sense of place". The uniqueness of the landscape should be reflected in the road network. The use of landmarks (natural and artificial) to help people make sense of their environment is also important.

Traditional neighbourhood development offers a scenario for sustainable growth as an alternative to urban sprawl. Wendy Morris concluded that the development, community and the environment all benefit from this form of development.

BIBLIOGRAPHY

Kaufman and Murrain, *Habitat Australia*, November (1992), pages 15-16.

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