7 PLANNED COMMUNITIES 1975 - 1985

7.1 BACKGROUND AND STANDARD PRACTICE

7.1.1 SURVEYOR SUBURBS – PRIVATE VALUES

In Australia, the United Kingdom, and United States, the Post War surveyor designed suburb has become the most prevalent form of residential development of all the suburban models. While not based on as cohesive a planning idea as the Garden Suburb and Radburn, the Post War surveyor designed suburb amalgamated a number of elements of previous models, specifically the low density and garden character of the Garden Suburb and the hierarchical street pattern initially developed at Hampstead Garden Suburb, and then fully articulated at Radburn. The post war population boom and economic prosperity has underpinned a form of development that has been largely the result of commercial and market influences, specifically the rise of mass tract lot production rather than from formal planning input. Civil engineers and surveyors have been more effective in devising efficient methods of lot production than were planners or architects.

Nevertheless there is a set of values which underpin this suburban form. The values of choice, affordability and individuality are especially significant given that they have driven the most successful form of suburban development from a consumer point of view. 'According to Fishman, suburbanites used nature (or more specifically, natural settings) as the alternative to the human-made city. Seeking refuge from cities overrun with strangers, the original suburbanites also turned inward to the life of the nuclear family and sought greater privacy'[95]. The values of the family as the central unit are retained. If anything the importance of the school or common open space as a physical focus has diminished. Many families may value a more spacious house than public open space. This choice may not have been available to earlier households as the development of the mass housing industry can now deliver far more floor area at an affordable price than ever before.

There have been a number of social scientists and commentators who have championed the low density PostWar Suburb. Hugh Stretton has been a vocal advocate of low density suburbs, specifically the intrinsic value of the private garden. Stretton places as much value on the garden as the house itself. On this basis his proposition is that the Australian low density suburb provides the 'best' housing in the world[96]. His criteria include:

- The most housing
- The most space per person
- The most houses with private gardens
- Equal share of indoor and outdoor space
- The lowest proportion of flats
- Provides the type of housing that most people want[97]

Stretton talks about how much time we spend in our houses and gardens. The average Australian family spends more time in their house and garden than in cars or at work. Because the house and garden can be afforded by all it is equitable in Stretton's view. Equity, choice, and individual choice are core values for Stretton. As a consequence the house and garden is the key element of quality of life, and is more important than transport. He therefore rejects city forms that sacrifice the house and garden for the sake of 'efficiency'. This counters the argument advanced by those advocating urban consolidation. We must understand the fundamental importance of this issue as it has implications for suburban and city form.

95 Fishman, Bourgeois Utopias: The Rise and Fall of Suburbia, 1987, Basic Books, quoted by Robert E Lang, 'Valuing the Suburbs' in vol 1, No 1 Opolis Winter 2005. University of California and University of Sydney

96 Hugh Stretton, Housing and Government – 1974 Boyer Lectures, 1974, Griffin Press, Adelaide

97 This raises the old conundrum as to whether people only want what is available or whether if different things were available that they would want something else

Interestingly, like Ebenezer Howard, Stretton has come to the conclusion that our cities are too big. This leads to the demand to reduce sprawl and consequently to increase residential densities. This results in smaller private gardens and consequently a poorer living environment. Because the notion of sufficient private open space is such a fundamental housing value to Stretton, he rejects urban consolidation almost wholly on this basis. In his view 'we should put home and neighbourhood at the heart of urban planning, then operate on the big public and commercial things'[98]. In other words Stretton would plan cities the other way around – from the house and garden to the local centre out. From this view of the world the consolidated city does not deliver a better quality of life to its citizens. This premise is hard to refute purely on the grounds of quality of life.

Stretton's values also reflect a more profound view about freedom, choice, and the rights of the individual; 'it means having ample, versatile, usable private open space, indoor and outdoor: a place of their own where they can live as privately or sociably as they like, and do as many and various and interesting things as possible'.[99]

During the 1980's, governments in the US, UK, and Australia began to look for ways to contain the spread of suburbs that had expanded at a pace which had not been envisaged. The cost of supplying infrastructure had increased considerably and environmentalists objected to the increasing amounts of green areas being given over to housing. Consistent with the 'surveyor' approach of maximum efficiency, many standards were re-examined largely by engineers, to identify ways to reduce land take. The result was that the land take for streets and residential land was reduced. The basic structure of the suburb was not. So while street and lot sizes were reduced, the predominance of the detached house and its garden was not.

98 Ibid,, Chapter 4, p.45
99 bid, Chapter 5, p.58

To counter the potentially adverse amenity impacts of less space, a series of codes and standards were developed in all three countries. In Australia a Joint Venture for More Affordable Housing was created by the Commonwealth government. This was followed by a national housing code AMCORD[100]. This was subsequently moved from an advisory code to an advisory document.

100 Refer Australian Model Code for Residential Design AMCORD Practice Notes, 1995, Australian Government Publishing Service

7.2 INTERNATIONAL EXEMPLAR – WOODBRIDGE, IRVINE 1975 - 1991

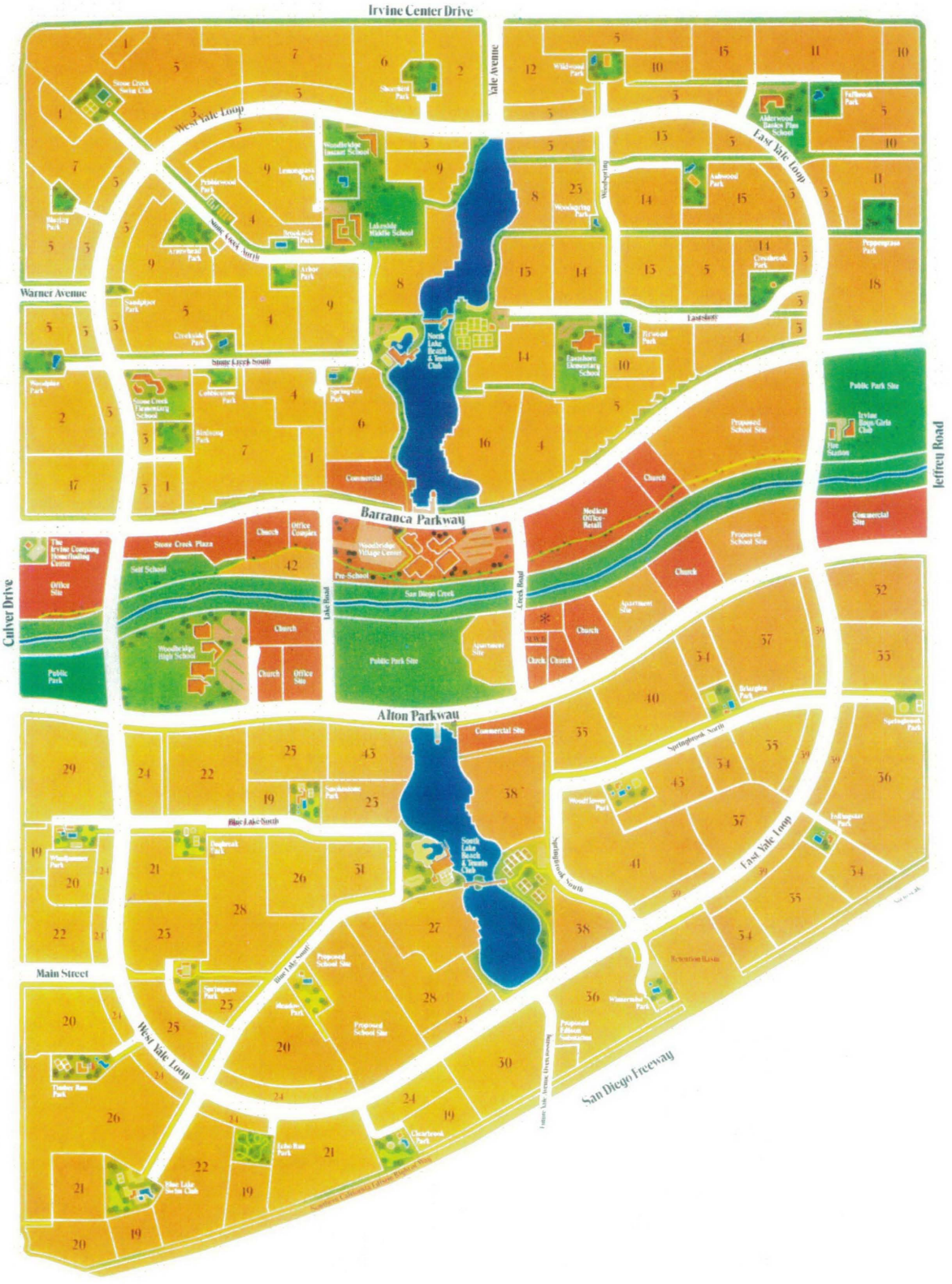
7.2.1 BACKGROUND AND VALUES

Orange County in Southern California is probably the largest regional development of its kind anywhere. 'Orange County and the Irvine area in particular, is the most substantial example of a mode of settlement typical of the post industrial era'[101]. In economic terms, settlements such as Irvine are comparable to metropolitan settlements. At some 786 square miles it is not a traditional city, neither is it suburbia. James Irvine originally established Irvine in the 1930's as a large agricultural ranch. Its growth was really driven in the late 50's by the establishment of the University of California, based on the Stanford campus model created by Frederick Law Olmsted. The GDP of Orange County is now larger than Austria or Denmark. Descriptions also vary from 'edge city' to 'world's largest theme park', containing an important university, office complexes, an international airport, garden city style residential communities, and several major shopping centres. While this mix may be similar to other metropolitan types, at Irvine uses are more segregated, car dependent, without a concentration and mix of uses one associates with a traditional city form.

Irvine has grown incrementally since the 1960's. By the late eighties, Irvine, at 25,000 hectares (100 square miles) housed over 120,000 residents and 200,000 jobs (similar to Sydney's CBD). The site sprang up around land donated to the University of California by the Irvine Company, who planned, constructed, and now manage Irvine. Irvine was developed as a series of residential communities, each aimed at different markets – Eastbluff is a 'hilltown' with extensive views over the ocean, while University Park is a district for those connected with the campus. Rancho San Joaquin was the first 'recreation – orientated community', equipped with its own golf course and tennis centre. Adjoining areas owned by the Irvine Company less suitable for residential development, were sold to outside enterprises. Importantly John Wayne Airport creates a regional hub linking to other regional centres. In the seventies it was decided to link the northern and southern areas with a new intervention in the centre of the site. Out of this emerged Woodbridge, an area of 700 hectares. It was developed between 1975 and 1991. Woodbridge itself forms the Irvine case study examined here.

Woodbridge reflects the values of family life, choice, individuality, space and landscape, as well as community.

101 Irvine, Plan and Architecture of the Campus, Lotus 89 (quarterly journal),1996, Elemond S.p, Milano, p.90



Historic Plan

7.2.2 ELEMENTS

Element 1- Master Plan Structure (Internal Core Connected – B)

The Woodbridge plan is linked together by a ring road, Yale Loop, which connects to adjoining freeways via a hierarchy of link roads. A central east/ west belt, consisting of high schools, open space and services, divides the plan into two mirrored halves. The original Irvine Plan envisaged this belt as a 'linear Downtown for the future city'.Two large artificial lakes running north/ south further divide the plan into four precincts. Within the four precincts are a series of smaller local parks. Woodbridge has approximately 27,000 residents in 9,300 dwellings, 10 hectares of commercial areas, and 80 hectares of open space. Key elements include:

- A linear east/ west green belt that also contains key community, commercial, and education uses
- Major east/ west arterial road systems at the edges of the greenbelt
- A loop road system connecting the four precincts and providing connections to main roads
- A north/ south water system that together with the greenbelt, creates four quadrant like precincts

Element 1 - Master Plan Structure


Warner Ave
Royale Ave
Hawk creek
Royal Oak
Eaglecreek

Element 2- Street Pattern (Spine and Loop – C)

The street pattern at Woodbridge is highly hierarchical and functions primarily to efficiently distribute vehicle movements and avoid through-traffic in residential neighbourhoods. While similar to the Radburn street hierarchy in the employment of collector roads and cul-de-sacs, the plan does not create the pedestrian pathway system across all areas, nor is the street pattern as connective. It is assumed that residents in each quadrant may walk to the parks within their precinct, but drive to the central green belt which has a major arterial road between the greenbelt and adjoining residential neighbourhoods.

- A loop road links the four quadrants to the main east/ west arterial roads
- Small loop roads and cul-de-sacs are accessed off the loop road
- No rear lanes
- Street pattern creates limited connectivity

Element 2 - Street Pattern

Element 3- Block Pattern (Irregular – B)

The block pattern is one of super blocks that are configured as a range of development parcels. The parcels can be further divided into blocks in a number of ways. The blocks are therefore the result of 'planned unit development' (PUD) where the developer may develop in the most efficient way, or in a way that results in a range of lot shapes best suited to the market. The local street pattern is therefore a result of this process rather than of a grid or other pattern.

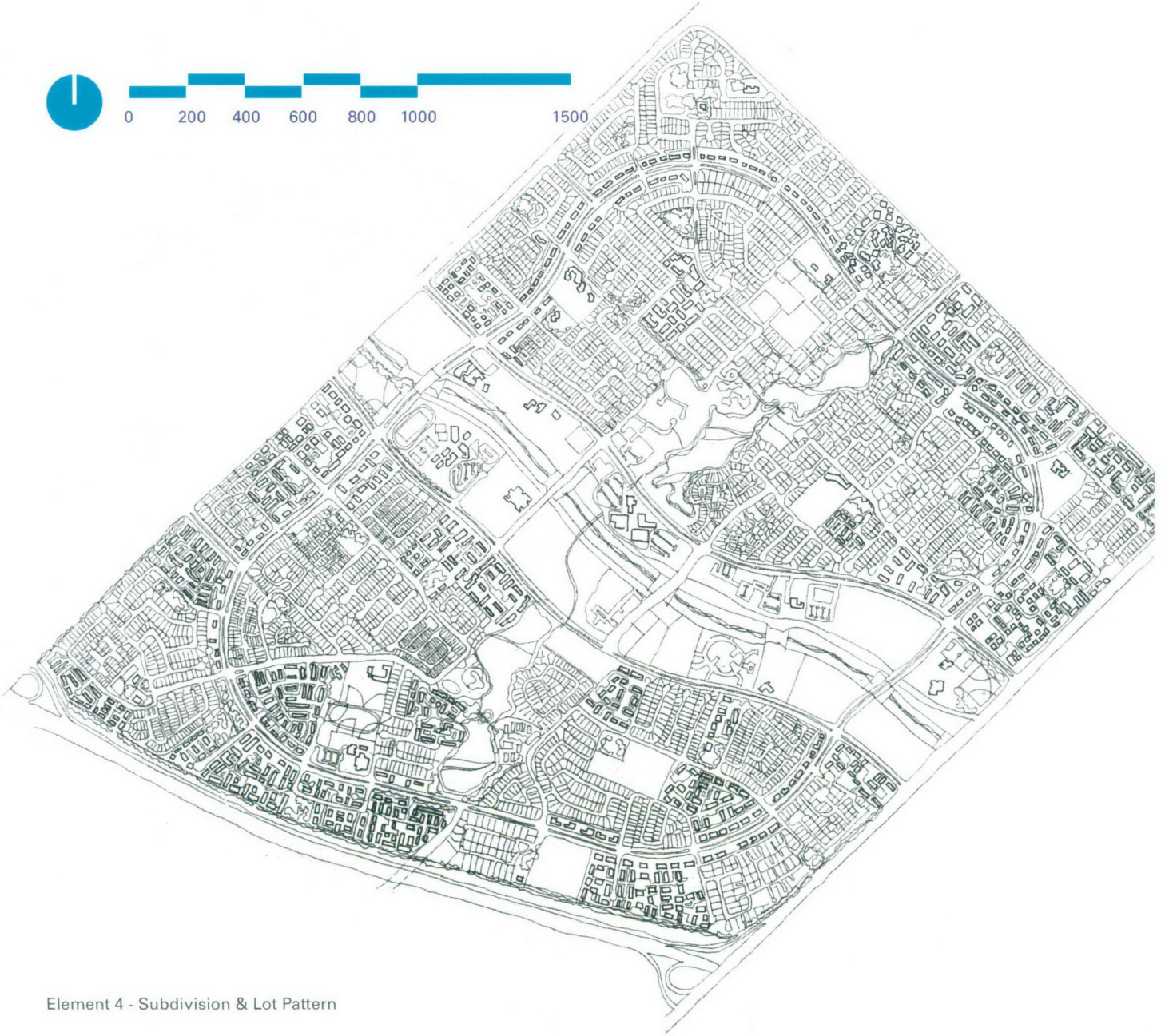
- Super blocks are the basic element
- Block pattern is determined by subdivision of the super lot generally organised around the cul-de-sacs
- As a result there is a mixture of block shapes – mostly irregular

Element 3 - Block Pattern

Element 4 - Subdivision and Lot Pattern (Irregular – B)

The subdivision pattern is principally small, relatively short detached dwelling lots. The density is fairly evenly distributed throughout the entire site. The subdivision pattern results from how blocks are configured from the super blocks to achieve different housing products

- Pattern largely determined by housing product in response to market perception
- Standard detached lots generally
- Some medium density clusters

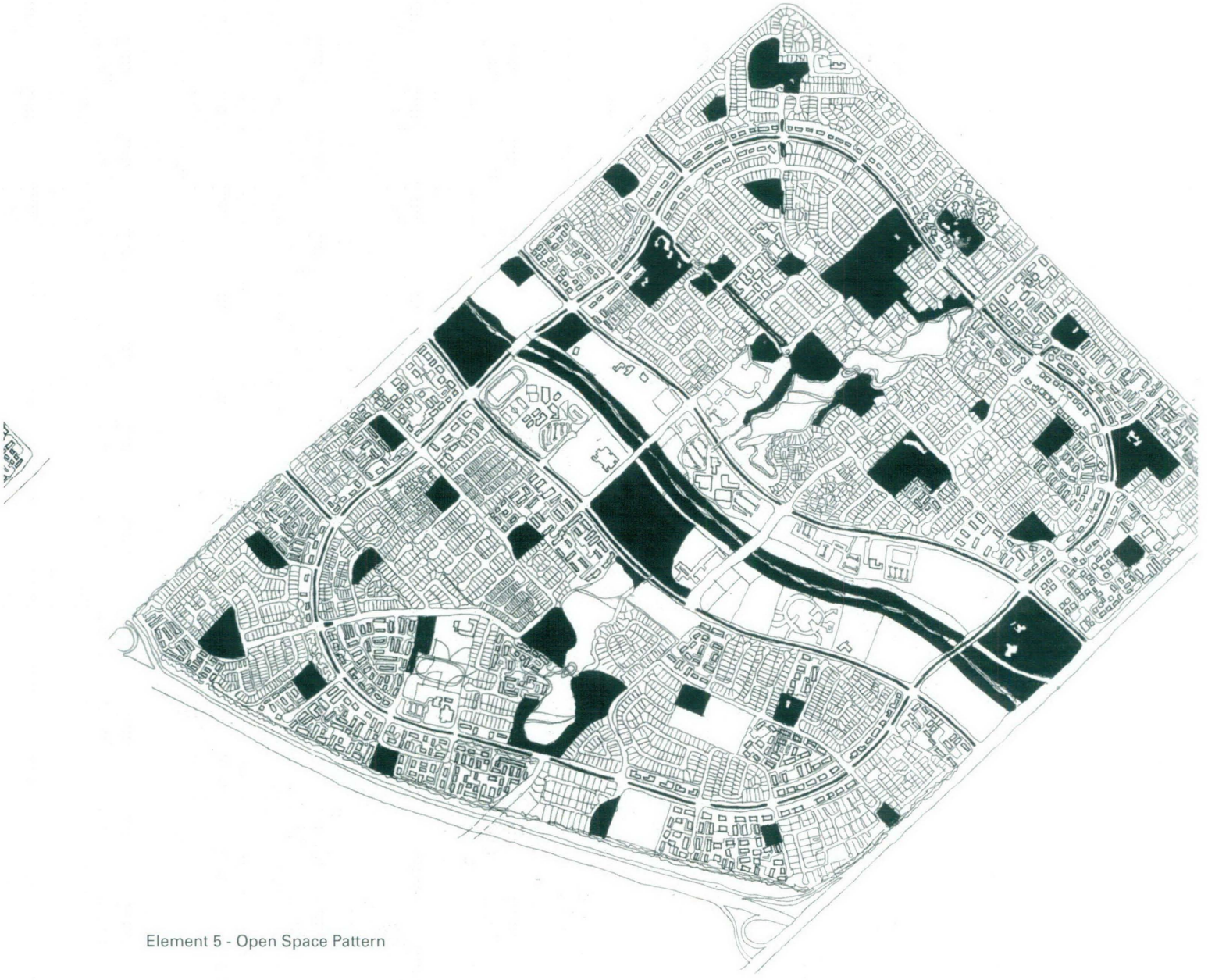


Element 4 - Subdivision & Lot Pattern

Element 5 - Open Space Pattern (Hybrid – C)

Open space is structured as a combination of linear reserves and local parks. The larger public parks are adjacent to the central east/ west creek within the greenbelt. There are also large community areas such as recreational clubs associated with each of the two large lake areas. There are then a large number of small local parks spread evenly throughout the four precincts as well as extensive walking, running, and cycle paths that link places within precincts, but not across precincts. Green spaces also act as a buffer between different functional sectors.

- Open space organised as linear north/ south and east/ west corridors dividing the site into four precincts
- A central open space 'beltway' is configured as a linear east/ west corridor separated by arterial roads (parkways)
- Secondary open spaces link precincts from east to west across the lakes
- Discrete parks located in neighbourhoods evenly across the site
- Parks generally do not address the street



Element 5 - Open Space Pattern

Element 6 – Built Form (Higher Density Linear – B)

Woodbridge, like the other precincts within Irvine, does not have a core that is well defined by built form. Like Radburn, the nodes are based on schools which are located within open spaces. The larger nodes are shopping centres surrounded by car parking.

Irvine is probably one of the first large estates where the basic pattern of subdivision and resulting built form was created so that it could change and respond to market demand. Unlike earlier prototypes where the street pattern determined the blocks, at Irvine larger super blocks were created that allowed individual developers to further subdivide in a way that suited the house types they may want to build (within the allowable density). As a result Woodbridge includes 1,600 condominium apartments, 4,800 townhouses, and 2,700 single family houses. Different densities are organised into 10 'enclaves 'throughout the plan, providing a range of market choices at all stages.

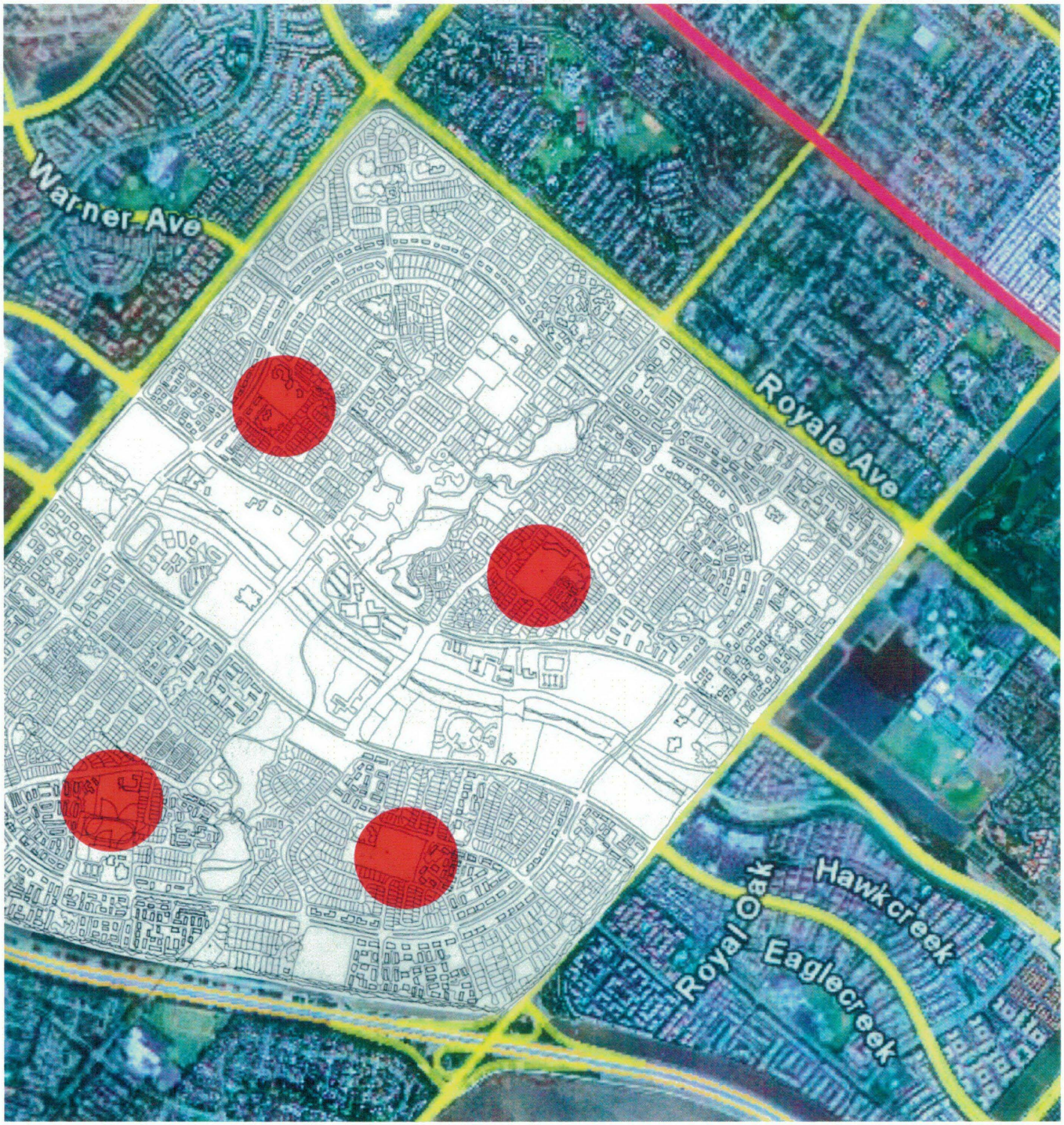
- Predominantly detached houses on small lots
- Architecturally themed in development parcels
- Range of duplexes, townhouses and apartments on super blocks

Element 7 – Housing Design (Site Specific – A)

Various house plans are specifically designed for compatible lots types, rather than specific to the place as in the case of many earlier exemplars such as Radburn. The house form is determined by the collective preference of the market at the time of development.

Element 6 - Built Form

Housing Design



7.3 AUSTRALIAN CASE STUDY - GOLDEN GROVE 1983

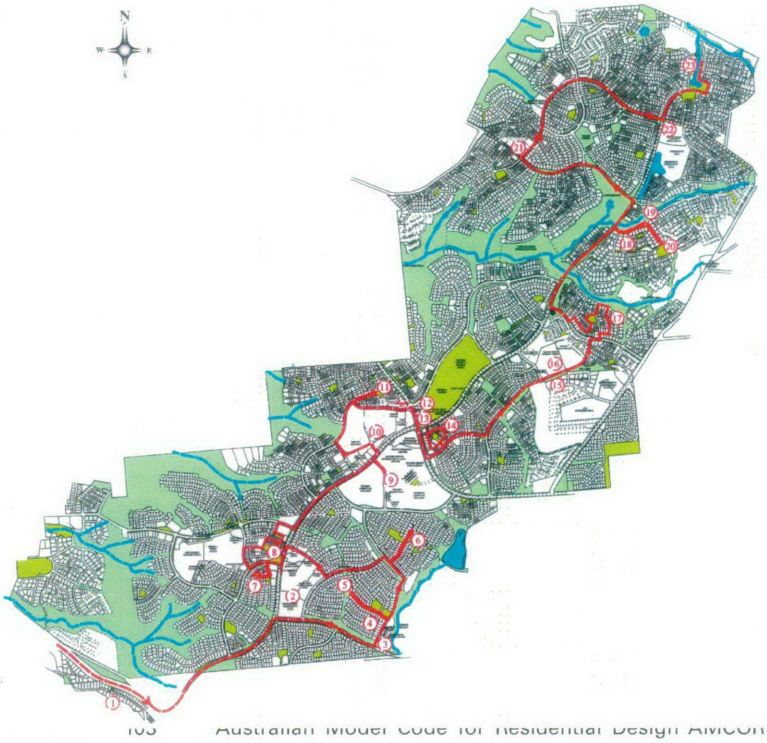
7.3.1 BACKGROUND AND VALUES

Delfin and the South Australian Urban Land Trust in suburban Adelaide developed Golden Grove between 1983 and 2003. Like Irvine in the United States, Golden Grove represented one of the largest developments of its type in the country. Golden Grove is a linear site some 1,200 hectares in area extending six kilometres in length from the south west to the north east. There are approximately 11,000 lots overall, together with a large regional shopping centre, three local centres, 16 schools and a shared campus, community facilities, 120 parks, and a performing arts centre.

While Golden Grove is much smaller than Irvine, nevertheless it represented a benchmark in residential development in Australia, winning Australian and international industry awards[102].

Golden Grove encapsulates very similar values to those of Irvine including individuality, choice, freedom, ample natural landscape and community.

The structure plan was developed in 1983. It was a 'flagship' project for the earlier Green Street program adopting the Principles of the Australian Model Code for Residential Development (AMCORD).[103] While the stated aim of AMCORD was to create neighbourhoods, pedestrian friendly streets, and a broader range of housing types, it also promoted Commonwealth and State government's urban consolidation programs, by allowing detached houses on significantly smaller lots and less overall road area. Golden Grove is an exemplar of these principles, extending a large open space network over five kilometres and organising small precincts into clusters. It also exemplified the street hierarchy of a limited access central boulevard feeding local looping local streets. Interestingly there has been no similar type of code for greenfields housing developed since AMCORD. This may be as a result of the dismantling of the Commonwealth Department of Housing and Regional Development. As a result, standards from AMCORD are still referred to by authorities.



Historic Plan

102 Prix d'Excellence 'World's best Residential Development' by the International Real Estate Federation in 1998

103 Australian Model Code for Residential Design AMCORD Practice Notes, 1995, Australian Government Publishing Service

7.3.2 ELEMENTS

Element 1- Master Plan Structure (Internal Core Connected – B)

The Golden Grove masterplan is structured around a spine boulevard that runs the length of the site, following the topography. From the spine, a series of loop distributor or collector streets extend from the spine creating small residential neighbourhoods.

Within the neighbourhoods smaller local streets service smaller clusters of houses not connected to a broader street system. This structure is similar to Irvine except that all streets were layed out as part of the overall masterplan and major schools and facilities at Golden Grove are grouped in nodes along the spine rather than a central 'beltway'. Key elements include:

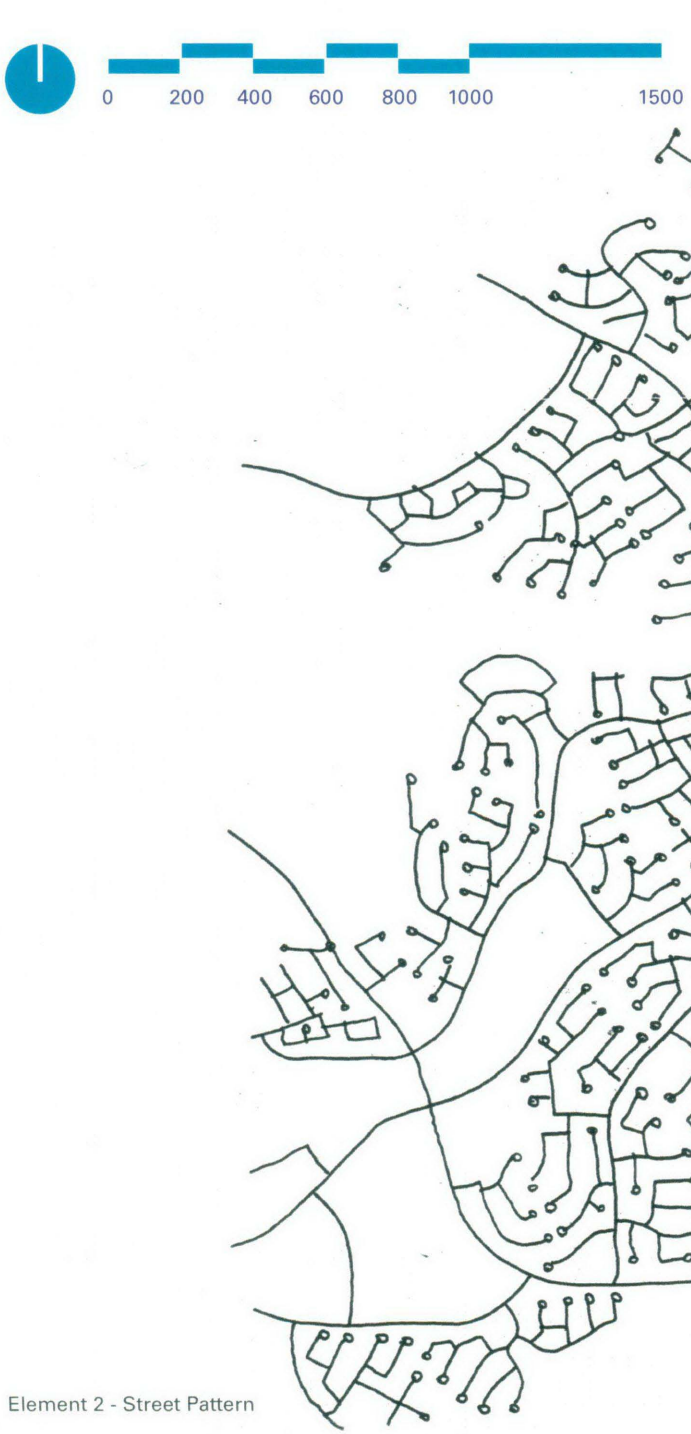
- Central spine boulevard structure
- Secondary loop roads
- Mixed uses organised into nodes

Element 1 - Master Plan Structure

Element 2- Street Pattern (Dendritic – B)

A 'spine' collector road (Golden Grove Drive) is the central organising element providing access to one or two local loop roads in a precinct or cluster. A series of smaller loop roads provide vehicle access to each precinct or cluster. From the loops there are short cul-de-sacs providing access and address to the dwellings. Because all streets are curvilinear and unconnected loops, it is difficult to move from one place to another except by car. It is easy to walk from a dwelling to a local park as each cluster includes some open space.

- Hierarchical street network
- A central spine collector road extends the length of Golden Grove
- A secondary feeder street system accesses the spine road
- Cul-de-sacs are accessed off the feeder streets
- Houses are accessed off the cul-de-sacs



Element 2 - Street Pattern

- No rear lanes
- Street pattern creates limited connectivity between neighbourhoods
- Connectivity limited to within the neighbourhood and local open space

Element 3- Block Pattern (Irregular – B)

Like Irvine block pattern is irregular. Rather than resulting from subdivided superblocks, the blocks at Golden Grove result from the 'dendritically' structured looping local street and cul-de-sacs patterns.

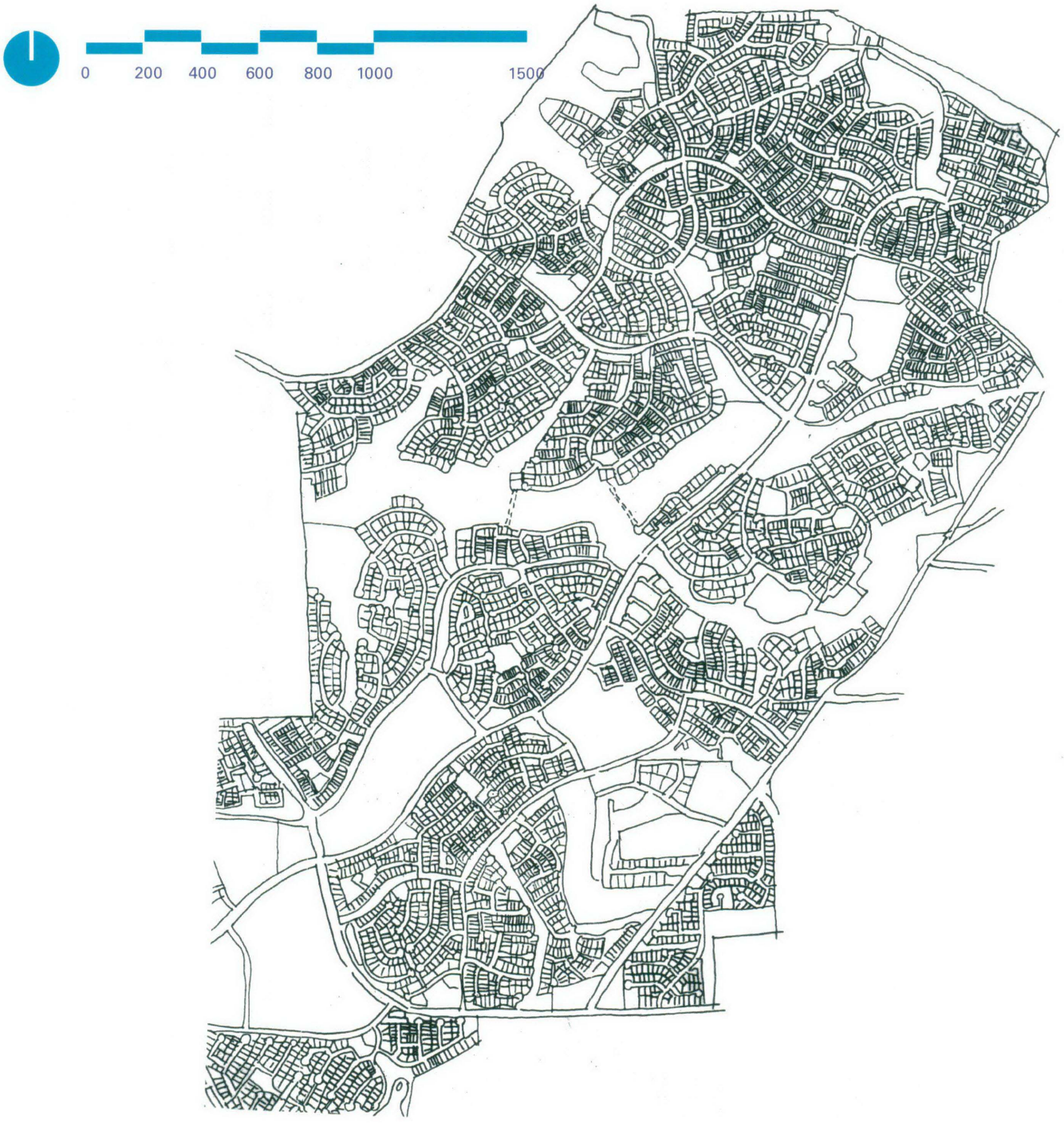
- Generally gently curvilinear and irregular
- Generally short blocks
- Traditional in form, without rear lanes

Element 3 - Block Pattern

Element 4- Subdivision and Lot Pattern (Irregular – B)

The subdivision pattern is conventional, with the majority of lots being small detached house sites, similar to Irvine. Many lots are irregular due to the significant number of cul-de-sacs and the topography.

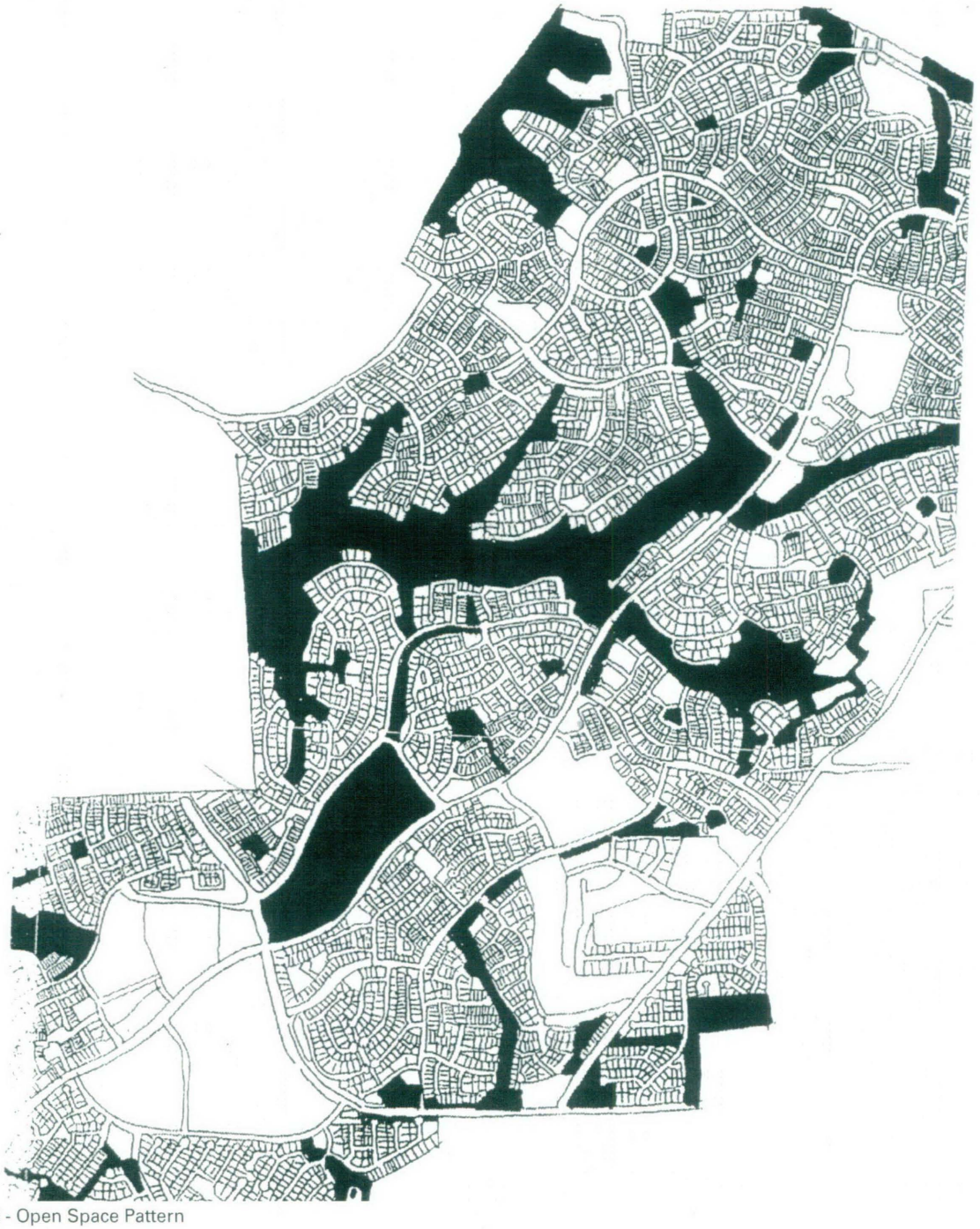
- Conventional pattern
- Irregular due to cul-de-sacs and topography



Element 5 - Open Space Pattern (Hybrid – C)

Landscape is an important element of Golden Grove, with streets and buildings generally designed to respond to contour and natural features. Open space is configured as linear reserves, following the valleys that run throughout the site, as well as more traditional local parks. As noted above, large parks and other facilities are aggregated into nodes along the spine boulevard.

- Combination of linear reserves and traditional parks
- Local parks spread throughout local neighbourhoods
- Streets generally surround open spaces and parks



Element 5 - Open Space Pattern

Element 6 –Built Form (Dispersed – C)

Like Irvine, Golden Grove is structured around local shopping and school hubs. In the case of Golden Grove the nodes are located along a central spine, Golden Way. The nodes are not defined by built form, rather they are organized as small local centres surrounded by an access road with parking.

Housing is organised in clusters around loop roads, in a similar fashion to Irvine. While housing density is not concentrated near transit or in one urban core, like at the earlier exemplars, attached dwellings and smaller dwellings are organized around local parks. Key elements include:

- Density grouped around open space
- Nodes such as shopping and schools organized along the central spine
- Built form does not define cores

Element 6 - Built Form

Element 7 – Housing Design (Generic – B)

The built form of Golden Grove is conventional in the sense that the dwellings are generally traditional detached small lot dwellings. The built form is more modest and not themed as it is say at Irvine where the houses are large, styled in regional themes. At Irvine this was partly a result of developers buying large super blocks and then designing enclave communities in a particular style as part of a market strategy. At Golden Grove, relatively modest houses were developed to fit both the smaller lot size and topographical constraints of the site. While not particularly architecturally distinguished the houses are well fitted into the landscape. This contrasts with some of the later housing which is less site responsive, being significantly larger, and sitting on small sites which have been levelled in the manner of more conventional suburbia. This later housing has not been developed by the original development team, and has considerably degraded the earlier subdivision pattern, landscape and built form.

- Modest built form
- Site responsive
- Not architecturally distinctive

Streetscape

Pathway

Typical Street

Higher Pension Town Houses