The Evolution of Suburban Design in Metropolitan Adelaide

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Abstract: As much as anything, urban development over the last century has been about suburbia. The design of housing estates and the centres that serve them have continually exercised the minds of planners, of developers and of the local, state and federal authorities charged with strategic planning, infrastructure investment and development control.

This paper considers suburban development in Adelaide as it has evolved since the introduction of comprehensive town planning around the time of World War 1. In particular it traces key design themes that have informed the shape of subdivisions and housing estates. These themes include neighbourhood units, centres for community and commercial activities, the layout of streets, allotments and open spaces and the melding of these features with the landscape. They are summarised by reference to the seminal Colonel Light Gardens suburb of the 1920s, the Living Areas concepts in the 1962 Report on the Metropolitan Area of Adelaide, the projects of the South Australian Housing Trust over the decades, the proposed city of Monarto in the 1970s, the master planned private estates of the 1980s and 1990s at West Lakes, Golden Grove and Seaford, and recent projects such as Mawson Lakes.

Introduction

Adelaide is a suburban city. Its settlement in 1836 coincided with the time when the idea of the suburb in its modern form was taken up by a wide cross-section of British society including those from whom the founders came (Hutchings, 1986a). Suburbia was seen to combine the best of town and country and by the 1870s Adelaide consisted of a central core, a parklands ring, a further ring of suburbs with others at the port and around the early villages. Town and country were intertwined on the Adelaide Plains as a suburban Arcadia (Hirst, 1973).

In the last decades of the 19th century, the application of public transport, deep drainage and reticulated water saw suburbs spread rapidly. Often poorly connected and indifferently designed, the spirit of Arcadia was under threat. Furthermore, Adelaide began to exhibit many of the problems, albeit on a small scale, then plaguing the rapidly expanding industrial cities of the Northern Hemisphere. The consequential town planning movement sought solutions, one of the most influential being Ebenezer Howard's Social City which evolved into the Garden City with its 'town-country' focus.

Given South Australia's traditions of conscious social purpose and Adelaide's suburban forms, it was perhaps inevitable that the theories of town planning were willingly adopted and applied firstly and most successfully in the design and development of a model suburb as a satellite to the Adelaide metropolis. Known as Colonel Light Gardens, it drew together many of the design themes of the town planning pioneers. Subsequently it has been a major reference point for those Adelaide suburbs developed as planned urban products.

The key design themes can be summarised into three: that of aesthetics and amenity, dealing with the pleasantness of places via the layout of their streets and spaces; that of environment, dealing with how these places are located on the landscape; and that of social matters, dealing with how plans and designs interact with the needs and desires of the communities they house. These themes intersect at the local level. In turn, they have interacted with a wider theme, viz that of the neighbourhood unit which became a key building block for the expansion of metropolitan areas in South Australia, as elsewhere. In this paper the themes are traced through the last half of the 20th century as the Adelaide metropolis burgeoned from 380,000 in 1947 to over one million today. Planned residential estates and metropolitan extensions by public and private bodies (often as joint venturers) are described, as are the statutory planning policies that evolved simultaneously. These places and policies have not been isolated items in a sprawling, urban mass. They have effectively determined Adelaide’s form. Hence they are the basis of its growth in the 21st century.
Colonel Light Gardens

Colonel Light Gardens, situated about six kilometres south of Adelaide, was designed in 1917 in accordance with the principles of the British garden city idea. Its designer, the journalist-turned-town planner Charles Reade (1880-1933), had familiarised himself with the idea’s key concerns and concepts during a two-year period in 1912-13 as a volunteer with the London-based Garden Cities and Town Planning Association. Following an extensive lecture tour of the major towns and cities of Australasia in 1914-15 (Freestone, 1998), he accepted a contract as Adviser on Town Planning to the South Australian government.

Colonel Light Gardens, or the Mitcham Garden Suburb as it was originally known, was established by the state government as a model suburb – it was intended to showcase the planning principles underpinning the modern planned residential environment and to lead the way in terms of other such developments in metropolitan Adelaide. Reade captured this vision of the future metropolis in his 1917 Adelaide and Suburbs plan that showed Colonel Light Gardens and numerous other garden suburb sites (Garnaut, 2000).

The garden city canon included a number of key planning principles: respect for the topography and existing natural features of the site, land use zoning, classification of roads according to use, provision of passive and active recreation areas sited for easy access by all residents, social mix, low density development and a park-like environment. Reade had seen these applied in garden suburbs in Britain and Europe and was particularly familiar with Hampstead Garden Suburb (1907), designed for social reformer Henrietta Barnett by architect-planner Raymond Unwin and held up internationally as the exemplar of planning ‘on garden city lines’. Following the South Australian government’s purchase in 1915 of the former Grange Farm at Mitcham for a garden suburb, Reade set about transposing the British model to the Australian setting (Garnaut, 1997).

The 300 acre (121 hectare) site was bounded on three sides by existing roads; the fourth ran in an irregular line and was a composite of residential streets and utility ways. Respecting garden city practice, the area was not subdivided into a series of gridded streets but, rather, superimposed with a pattern of roads of varying line, length and width. Such variation created visual interest as well as opportunities for vistas. The use of the curve in particular reinforced the thought forwarded by American planner Charles Mulford Robinson at the turn of the century that the curve allowed each advancing step to disclose a new view (Hutchings, 1986b). Today, the power of this proposition is most noticeable on the journey west along Prince George Parade towards The Strand shopping precinct. Here the view gradually opens up to reveal firstly a pocket park, then the shopping strip and finally the main suburb entrance at Piccadilly Circus. Although the circus was built upon after World War 2, until then its open aspect would have allowed a long view across the western plains.

Reade strongly criticised the local statutory regulation of 66 and 100 feet wide streets, and instead adopted the British standards of arterial, secondary and residential roads as well as the American parkway idea (Garnaut, 1999). At the top of the road hierarchy were the boundary arterial roads. Inside the tightly contained site, the intermediate secondary (collector) roads carried traffic moving through and between various parts of the suburb whilst residential streets, the narrowest in the hierarchy, were assigned to the housing precincts. Their purpose was to discourage through traffic, a concept more fully developed in the mid 1920s by American architect Clarence Perry in the neighbourhood unit.

The main suburb entrance, Piccadilly Circus, adopted the iconic (Miller, 1998) semi-circle with radiating streets used by Unwin at Hampstead Garden Suburb and widely published as ‘The Garden City principle applied to suburbs’. Two secondary entrances to the south and north adopted a modified version of this form. Complementing the road system was a suburb-wide network of utility lanes that carried the infrastructure for all services and communications. This unique element of the plan created safe and permeable pedestrian and bicycle pathways.

Sites were set aside for designated purposes: residential, recreational, educational, ecclesiastical, community, commercial and administrative. A hierarchy of open spaces pervaded the layout. The largest was a 10 acre oval and adjacent lake and formal gardens. A middle order formal recreational complex comprised tennis courts, lawn bowls and croquet rinks; formal entranceway gardens also featured in this level as did a series of informal internal parks (Freestone and Nicholls, 2001) behind houses on smaller
blocks. Strategically sited garden reserves at street corners as well as the street verges constituted the lowest order.

A grouping of buildings for community purposes formed what would be described in the post-World War 2 era as a neighbourhood centre. Comprising infant and primary schools, adjacent children’s playground and the suburb oval, as well as The Strand shops to the north and a nearby public institute, this early agglomeration was later expanded to include a Boy Scout and a Girl Guides hall. On the edge of the precinct to the south-west was St Therese primary school (1925).

The Neighbourhood Unit Concept

Although Colonel Light Gardens predated the emergence of Perry’s neighbourhood unit concept, it illustrates the unit’s key characteristics – it is a precinct bounded by major roads and its internal design focuses upon a centre that combines community and commercial facilities. As Perry conceived it, the neighbourhood unit was a residential area for anywhere between 5 and 10,000 people. Bounded by major roads it had a centrally located primary school no more than about one half-mile from any dwelling. Community and commercial facilities were located in close proximity to the school. Architects Clarence Stein and Henry Wright applied the neighbourhood unit idea at Radburn (1928), New Jersey, adapting it to take account of rising motor car ownership. They aimed to separate pedestrians and vehicles with a hierarchical road system of collector roads and culs-de-sac. A scheme of internal green spaces formed pedestrian routes between residential areas and schools, shops and community buildings in the centre. A more basic form of neighbourhoods was ex-policeman Alker Tripp’s model of precincts bordered by arterial roads. These would be used for particular purposes – residential, industrial, business – and their internal roads would be for local traffic (Brown and Sherrard, 1969). The ‘hugely influential conceptual contribution’ (Ward, 2002, p. 117) of the neighbourhood unit has had long-lasting effect on suburban design internationally.

Elizabeth

The South Australian Housing Trust (SAHT) began acquiring about 2000ha of farmland north of Adelaide in 1949 for the new town of Elizabeth. The Trust’s chief architect-planner, Henry Smith, undertook study tours in the United States and Britain including to the New Towns; the subsequent Elizabeth town plan used the neighbourhood unit as the basic building block.

Shops and primary schools together form neighbourhood centres located more or less at the spatial midpoint of each unit, usually adjoining a low order collector road. Linear open spaces, adjacent to the collector or arterial roads, separate most units but there are no pedestrian systems leading to centres. Street layouts are based on a notional grid but with curves, loops and closes that create the suggestion of dwelling clusters. Some of them focus upon small open spaces or pocket parks. There are few culs-de-sac.

Considerable thought was put into the site planning of centres, at least for their commercial functions. For example, at Elizabeth Grove a shopping mall or walkway was created with small squares or plazas at either end. Carparks adjoin them. Trade areas are just beyond. A proposed ‘community hall’ faces an important intersection and this agglomeration would be seen as symbolizing the centre.

Subsequent Housing Trust development

At the end of World War 2 the SAHT became a large development corporation building, in effect, a number of other new towns as well as individual suburbs and extensions to regional cities, particularly Whyalla on Eyre Peninsula (Hutchings and Garnaut, 2005). Suburban design gradually evolved after the Elizabeth project. The following summarises the themes as set out by John Byrne and Michael Hutchison, two of the Trust’s senior designers (Byrne and Hutchison, 1986).

Streets became more curvilinear, pocket parks persisted as focal points as did the school for the neighbourhood unit overall. Culds-de-sac were applied sparingly. Due to the trend ‘towards large variety supermarkets or discount department stores’ (Byrne and Hutchison, 1986, p. 3), the number of shops in centres such as Elizabeth Grove was reduced to what, in retail terms, would be called a “local centre”. A distinctive Housing Trust design for these was used in many areas north and south of Adelaide and in country towns. Later, open spaces started to be aggregated into larger parcels more useable for formal recreation and alongside arterial and collector roads.
The innovations during the 1950s and 1960s eventually included:

- generally curvilinear layouts
- a greater sense of road hierarchy
- an avoidance of four-way road intersections
- (early on) a variety of culs-de-sac forms
- (early on) a variety of road junction shapes
- an avoidance of housing on arterial roads
- a use of small reserves as "filler" devices
- diversion of part of the formal open space provision into buffer landscaping along main roads
- street to street walkways (between houses) to direct access to community facilities (Byrne and Hutchison, 1986).

Around 1970 there were major changes in direction. The SAHT took over a 45 hectare parcel of land at the northern extremity of the West Lakes development on the upper reaches of the Port River. Its brief was to plan and build an estate of attached housing. The concept was Radburn-influenced with a large inter-connected pedestrian realm of landscaped walkways and open spaces. The local school was at the heart of these and, with no boundary fences, its play areas merged with the open space system. The sole collector road was raised to pass over the central open space.

This Radburnesque approach was then applied to new estates such as Smithfield north of Elizabeth, and Morphett Vale and Hackham West east of Noarlunga Centre. The latter project had a very distinctive character resulting from melding the social imperatives of the neighbourhood unit with the constraints and opportunities of an undulating land form of low hills and long wide valleys. A north-south linear park was its defining feature with other smaller parks leading to it. A neighbourhood centre straddled it, with shops and a community hall on the west and a primary school to the east. P-loops and culs-de-sac were used as access roads. The designers tussled with the problem of keeping through traffic out of the estate while at the same time giving access to the centre. In the upshot a collector crossing road traversed the linear park at the centre. In summary, in the SAHT projects noted, the aesthetic, environmental and social themes came together within an integrated neighbourhood unit.

During this period some private developers were influenced by the neighbourhood unit principle and they applied many of the design themes mentioned above. An early example was the subdivision of Kesters Farm (now Para Hills) 10 kilometres north of Adelaide. In the spirit of the philosophies underlying the neighbourhood unit, Reid Murray Developments and its successor, Realty Development Corporation, included a primary school with nearby local shops, swimming pool and kindergarten in its comprehensive scheme (Gowers, 2006).

**West Lakes**

In 1959 the then South Australian Harbors Board and the South Australian Housing Trust proposed a lake and a housing estate on the swampy land forming the upper reaches of the Port River 12 kilometres north-west of central Adelaide (Town Planning Committee, 1962). In 1969 the Dunstan Labor government commissioned the Development Finance Corporation to build the estate and lake as West Lakes. It varied from the main themes in as much as it was focused on a district (retail) centre and a stadium with city-wide catchments, and it resulted in a complete reworking of the landscape. At detailed level though, its dwellings, some with lakeside frontages, are clustered around culs-de-sac to form the community groupings apparent in the earlier estates and the contemporaneous Monarto project.

**Monarto**

The Dunstan Labor government decided in 1972 to build a new city near the country town of Murray Bridge. To house up to 180,000 people, it was part of a strategy to slow and redirect the growth of metropolitan Adelaide. The Monarto Development Commission Act of 1974 charged the Commission, under S13, with the responsibility of carrying out the social and physical planning, development and construction of the city; arguably the first statutory application of 'social planning' in Australia. The Commission’s social scientists re-evaluated the neighbourhood unit principle for the project and prepared a Design Philosophy and Social Considerations Brief to assist the Commission’s designers, viz the town planners, landscape architects, architects and engineers (MDC, 1974).
The brief recommended that small groups of dwellings, each focused upon a ‘common space’ (MDC, 1974, p. 17) be gathered to form a residential precinct of 3500-5000 people. Its core would be a ‘village centre’ containing a pre/primary school, recreational and community facilities and a corner shop. Each dwelling group would be linked to the centre by pedestrian and cycle paths separated from the road system.

The Monarto Commission adopted the philosophy of ‘design with nature’ as set out in the recommendations of the 1973 Federal Government’s Committee of Enquiry into the National Estate (MDC, 1975). Thus, the ‘planning designers’, as they were termed in the Commission, had two briefs – the social and the environmental – to reconcile.

Planning and design from concept to pre-survey took place for the Residential Golf Course Development on the low hills and shallow valleys west of the proposed city centre. A ridge gently rising to the northwest was used as a linear park. A ‘local activity centre’ was placed upon it as the community focus for a neighbourhood of 3600 people disposed on the slopes. As with the SAHT’s planners referred to above, Monarto’s designers grappled with the need to preserve the integrity of the open space corridor and prevent, or at least minimize, through traffic in the centre from the necessary internal collector road. A bus-only connector was the solution. The centre was ‘to provide for local convenience shopping, health, education and other community facilities within walking distance of the residents’ (MDC, 1977, np). Although the new city did not proceed, these strong social and environmental themes influenced subsequent suburban design and development in metropolitan Adelaide and elsewhere (Jones, 1998).

Golden Grove

Golden Grove is located on an undulating 1230 hectare site about twenty kilometres to Adelaide’s north-east. Like its predecessor, West Lakes, it was a joint venture between the South Australian government through the South Australian Urban Land Trust and the private developer, Delfin Property Group in cooperation with the local government authority, the Tea Tree Gully Council.

Golden Grove was conceived as a series of twenty-six villages to house an eventual population of around 30,000 people (‘Everything you’ve ever wanted to know about Golden Grove’, nd). Each village has a neighbourhood park or square as the focal point. Some include a neighbourhood shopping centre, a primary school, churches and other community facilities like health services. Others simply have local shops. ‘Hike and bike’ paths interconnect the villages, community facilities and various sporting reserves.

The hierarchical road pattern responds to the topography and includes two main collector roads that traverse the entire site, and culs-de-sac in the residential areas. A central town centre integrates an education zone – a shared site for three secondary school campuses – an arts and sports complex, and a substantial commercial precinct sited across the main road to the north-west. Viewed from the outset as a development to suit people at all stages of life, it offers clusters of various housing options (Garnaut, 1998). In terms of urban structure, it is a noteworthy exposition of the neighbourhood unit principle, modified to fit the imperative of the terrain.

Seafood

In 1989 a joint venture was initiated at Seaford, near Noarlunga Regional Centre, 26 kilometres south of central Adelaide. A relatively flat site, intended to house about 19,000 people, it contains one ‘district centre’ and three ‘local centres’ each of the latter forming the nucleus of a neighbourhood unit bounded by arterial roads and traversed by collectors. While ‘local’ in retail terminology, the centres are combined with schools and community facilities to form a classic neighbourhood centre (Seaford Joint Venture, 1992).

Around 1990, reflecting the international significance of New Urbanism, there was intense debate in local suburban design circles about the merits of various street layouts. Culs-de-sac and contoured curves lost popularity to formality. Byrne and Hutchison opined that ‘this might have been a search for the desirable qualities of a more urban... approach.’ There again, ‘it may have been in response to a degree of boredom with the established approach’ (Byrne and Hutchinson, 1986, p. 12). The street layouts in Seafood then are very formal, the ‘iconic semi-circle’ anchoring a system of grids and axial avenues. Using a former railway corridor through the site as a cue, linear parks are woven into the street layouts.
Mawson Lakes
Formality is also a feature of the streets at Mawson Lakes, albeit some dwellings are clustered around loops and culs-de-sac. All are neatly integrated into a system of ‘major residential streets’ or boulevards that form a collector system. Commenced in 1998, also as a joint venture, Mawson Lakes is situated north of central Adelaide adjoining a ‘technology park’ and a campus of the University of South Australia. Its planning is a distinctive variation on the neighbourhood unit theme having a ‘town centre’ as a hinge between the residential estates on the west and the university and ‘technology park’ on the east (Mawson Lakes Update, 1998). Streetscapes with corner clock towers, divided shop frontages and closely spaced two storey housing are departures from those in earlier estates. They mark a different, perhaps ‘New Urbanist’, design direction now being emulated elsewhere in metropolitan Adelaide.

Planning policy
The major suburban design themes were embedded in statutory planning policy from the post-war years and have run parallel to and interplayed with the development of residential estates as planned urban products. The 1962 Report on the Metropolitan Development of Adelaide became the Metropolitan Development Plan by the passage of the Planning and Development Act in 1967. Chapter 18 of the Report, titled ‘Living Areas’, contains a ‘Diagramatic Layout of a Metropolitan District’. Accompanying text under the heading ‘Design’ states: ‘Living Areas should consist of a number of smaller suburbs, sometimes called neighbourhood units, of approximately 5000 inhabitants. Each neighbourhood unit should be bounded by a system of secondary roads …’ (Town Planning Committee, 1962, p. 90).

The Report (1962, p. 232) makes reference to Elizabeth where the principles of neighbourhood design were clearly applied, each unit containing a ‘shopping centre, a primary school and other community facilities’, with a road pattern consisting of a system of secondary roads and local access roads being designed to prevent through traffic and maintain the residential character of the neighbourhoods. A concept plan for a neighbourhood at Salisbury Downs (now Paralowie/Salisbury Downs) south of Elizabeth was used to illustrate these principles. According to Stuart Hart, Chairman of the Town Planning Committee responsible for the Report, in using these principles the authors were influenced by a number of factors including the theories and practices of suburban design from Radburn through to the post-war British new towns (Stuart Hart, pers. comm., 23 February 2007). Thus, in 1967, the bundle of design principles underpinning the neighbourhood unit concept received an official imprimatur.

The rapid expansion of metropolitan Adelaide in the post World War 2 decades occurred along these lines in large part. The road grids in the Hundreds of Noarlunga in the south and Yatala and Munno Para in the north were surveyed in the manner of Colonel Light’s 1837 ‘District of Adelaide as divided into Country Sections’. These well-spaced grids can be seen as the ‘genetic endowment’, as Kevin Lynch puts it (Lynch, 1984, p. 230), for subsequent design and development, and an apt framework for neighbourhood units.

The SAHT and, to a lesser extent, private developers, applied these design principles over the large greenfields tracts of Noarlunga in the southern part of metropolitan Adelaide, and of Salisbury, Elizabeth and Munno Para in the north. The structure planning and land use zoning in the statutory Development Plans of municipalities regularised them (e.g. [2002] SAERDC, 126, para 10).

In 1989, the first edition of the Australia Model Codes for Residential Design (AMCORD) was published (Howe, 1993). A compendium of suburban design principles, it has been influential in South Australia and the nation. While having no statutory relevance it is ‘an accepted tool’ for use in appropriate residential development matters ([1998] 5 SAPED 27).

Observations and reflections
The design themes considered here have been remarkably durable since the town planning pioneers collated them into a coherent development philosophy up to a century ago. Themes of aesthetics and amenity have been expressed in the layout of streets, parks, open spaces and dwellings. These have been strongly debated, as it is a characteristic of designers in all fields of endeavour to argue forcefully about how items in their palettes should be applied. But solutions are as much about personal preferences as eternal verities. As Wolfgang Sonne, the theorist of ‘urbanistic themes’, has recently concluded, urban forms do not have meaning but simply create the potential for meaning (Sonne, 2003).
Grids, curves, axials are all options in the suburban designer’s palette to be used with other elements such as use, function and terrain.

Terrain leads to the second theme. The pioneering designers sought amenity, inter alia, by encompassing natural features in their plans, for example plants, trees, streams and the form of the land. This approach became more explicit 40 years ago with McHarg’s ‘design with nature’ analyses and this has continued through to today’s ecological sustainability philosophies. Thus the environmental theme is seen as fundamental and unchallengeable.

This is not so with the ‘social theme’. The neighbourhood unit has symbolized ‘community’ for most of the last century and has been a major building block of metropolitan Adelaide and of many other cities. It has been refined, re-evaluated (as in Monarto) and reworked as in the New Urbanist approaches in the USA (Hebbert, 2003).

However it is under challenge. Its central pivot is a centre integrating schools, community facilities and retailing, the last being variations on the corner shop and small business theme. It is common knowledge that many such enterprises have failed and both the older suburbs of Adelaide and those of the modern era are littered with closed up shops. The Super Market, as it was originally called (Zimmerman, 1956), and its successors, have taken over with their well-known effects on city form and suburban patterns.

Until recently though, the school (usually primary) held its place as the hub of the neighbourhood unit. But this is now in question. For example a recent judgement ([2004] SAERDC 55, para 146) of South Australia’s Environment, Resources and Development Court had this to say:

The meaning of and the weight to be given to “local” exercised the minds of the parties considerably as it is an issue that goes to the heart of planning policy and practice. The location of schools was an important determinant of urban form during the era of rapid metropolitan expansion over the last 60 years. Primary schools were generally placed at the focal points of “neighbourhood units” based upon local school population catchments and bounded by collector roads. In turn, three or four of these nested within the catchment of a secondary school and they often determined the location of centres. … This arrangement evolved in a period when community attitudes were strongly focused on locally based facilities and spatial planning reflected this. However, these attitudes have been modified with householders travelling further afield for all sorts of community, retail and recreational services, including schools, whether public or private.

Public education policy also seems to threaten this primacy. At the time of writing, South Australia’s Education Minister has announced that nineteen primary schools will be closed and replaced by six ‘super schools’.

There are some strong challenges therefore to the orthodoxy of suburban design as it has evolved in Adelaide over the last half century or so. Perhaps in the 21st century, the neighbourhood unit will regress and only prevail in its most basic form as the traffic free precinct of Alker Tripp. Perhaps the fundamentals of ecological sustainability will throw up detailed streets, place and space designs unforeseen from our present viewpoints. Notwithstanding, these will, perforce, play out within the patterns already laid down. As Donald Olsen has reminded us, ‘each generation lives in the city built by its predecessors’ (Olsen, 1986, p. 285).
References


Monarto Development Commission (MDC) (1977) Monarto Residential Golf Course Development: detail planning for development areas 2a and 7a, Yuncken Freeman Architects and Urban and Regional Planners and Town Planning Division.


Seaford Joint Venture (1992) Seaford Master Plan, Executive Summary ([Adelaide]: Kinhill Group, Kinsmen Pty Ltd).


South Australian Environment Resources and Development Court (SAERDC), Engels Hardware Pty Ltd v City of Salisbury, [2002] SAERDC 126, para 10.

South Australian Environment Resources and Development Court (SAERDC), St Andrews School Inc v Corporation of the Town of Walkerville & Ors, [2004] SAERDC 55.

South Australian Environment Resources and Development Court (SAERDC), Stuart v Charles Sturt City Council [1998] 5 SAPED 27.

