4.7 Western Australian Area Strategies

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4.7.1 Bunbury Area Strategy

Illustration 4.69 Bunbury Area Strategy map (The Report, Vol. 1, facing p. 52)
4.7.1 Bunbury Area Strategy

Background
The coastal city of Bunbury lies some 180 kms south of Perth, and is a mixed development of residential and commercial uses together with a diverse export base of timber, electricity production, market garden produce, agricultural production and minerals. The Bunbury Area Strategy included affordable housing, involving both the private and public sectors; the provision of infrastructure, particularly in attending to a sewerage back-log and the advancing of tourist and recreational development sites. Bunbury is another example of the Program's concern with the resuscitation of existing water front developments. Given the diversity of component initiatives and their separation one from another this Area Strategy is a Category 2, but because of its perceived lack of cohesion it is close to Category 3.

Objectives
- ‘To improve labour market outcomes, particularly for females and young people;
- to facilitate the growth of Bunbury as a regional centre and reduce pressures for outward expansion of metropolitan Perth;
- to reduce the cost of urban expansion in Bunbury by maximising the use of existing social and physical infrastructure in the area;
- to reduce reliance on private cars;
- to equip Bunbury with a sustainable waste water treatment system;
- to provide a model for urban redevelopment and to demonstrate the benefit of consolidation and energy efficient housing;
- to improve area planning and management coordination, and
- to improve the urban environment and to preserve its heritage.’ (The Report, Vol. 1, p. 52)

Urban design evaluation
The project contained a number of positive initiatives that when taken together did not succeed in contributing to a coherent emerging urban form. Even more disappointing was that there is no indication that this is likely to occur in the future. As in the case of Honeysuckle, the Bunbury Area Strategy is an extremely diverse range of individual components, but whereas the former has the potential to eventually become a coherent and legible whole Bunbury conveys scant evidence of such a prospect. Accordingly, any urban design evaluation is focused on components of this Area Strategy, which include:

- the Carey Park demonstration medium density public housing redevelopment;
- the construction of marina facilities to improve access and protection for both fishing and leisure craft;
- a Dolphin Discovery Centre as part of an eco-tourism trail;
- removal of oil storage tanks from Marleston Hill Lookout, and
• some public domain foreshore development work around Koombana Bay and the development of the leisure and fishing boat marina.

The other components remain important as part of the broad urban domain, since they belong to the preparatory ‘pipes in the ground’ design stage. However, their bearing on any emerging built outcome was either not clear or of limited influence and they were therefore not pursued further.

These components were:

• the relocation of a waste water treatment plant to enable future residential development at Marleston Hill site;

• the relocation of Westralia facilities to provide easier access from the CBD to the foreshore, beaches and marina;

• the construction of Casuarina Drive to make safer carriage of heavy vehicles to the harbour away from proposed residential precincts;

• a rehabilitation program for North Shore/Koombana to improve access for tourists and enhance facilities for local residents;

• the demolition of part of the cooperative bulk handling (CBH) silos to make better use of former industrial land, and

• the construction of a new sewer spine to enable housing intensification in the Strategy Area.

Buildings and their grouping

There was nothing in this section that transcended everyday placement and grouping that warranted further enquiry and comment.

Public domain

The public domain, in a very real sense, is composed of as many public domains as there are associated with the various activity areas. These activity areas in this evaluation include the Carey Park housing redevelopment, the construction of marina facilities, the Dolphin Discovery Centre as part of an eco-tourism trail and some foreshore development work.

Safety and security

The components of this Area Strategy were both too variable in nature and too dispersed to be able to draw any conclusions in terms of safety and security.
Activity

All the activities viewed were of modest scale and drew the following observations. The Carey Park housing utilises traditional forms and materials with brick and corrugated metal roof sheeting; the marina employs the standard componentry that can be seen in most small craft marinas; the Dolphin Discovery Centre is an unassuming contemporary building; the Marlston Hill site is yet to be realised and the waterfront development whether Program funded, and/or financed by a parallel initiative, is an artless contribution to waterfront amenity. (Illustration 4.70)
Conservation and heritage

The lighthouse on the promontory has a dual use path and dune restoration program. However, the promontory itself awaits a major activity program, since at the time of the field inspection it was simply a wind-swept dirt field. *(Illustration 4.71)*

*Illustration 4.71    Lighthouse promontory*

Landscape

The promontory awaits a major landscaped initiative. Otherwise there were no other landscape design initiatives warranting further inspection.

Environment

Given that Bunbury is a coastal city exposed to the elements, there appeared little attention given, particularly in the public domain, to providing shelter from the rain, wind and sun. These absences were particularly evident in new development. However, the Carey Park housing exhibited modest roof overhangs and purposeful sun hoods over the windows.

Ecological response

The singular achievement at Bunbury is the removal of the tanks from the Marlston Hill site.

Circulation

The construction of Casuarina Drive which was proceeding at the time of the field visit is to ensure safer carriage of heavy vehicles to the harbour and away from the proposed residential precincts.
Public art

Public art was not an issue in this development.

Social

Bunbury experiences structural unemployment in both youth and females. Accordingly, this Area Strategy aimed at industries that could generate employment such as tourism together with hospitality and retail as these activities are known employers of these groups. The success of this objective is unknown, however to precipitate these activities: (The Report, Vol. 1, p. 52)

Twenty six superlot or group sites were created for mixed tourist, commercial development within the Bunbury Area Strategy. The sites offer a range of development opportunities for larger scale motel/hotel, serviced apartments, short stay lodges, chalets, caravan parks, retail hospitality and nature-based tourism. These uses are specifically focused on reducing local structural unemployment trends for youth and females.

Management processes

No initial planning and design oriented management plan was found for this Area Strategy during the research.

Conclusion

The dismaying aspect of the Bunbury Area Strategy was not the broad range of individual initiatives but in perceiving their place now, or in the future, contributing to an urban framework and coherent and built outcome. (17)
4.7.2 East Perth Area Strategy

4.7.2 East Perth Area Strategy

Background
The East Perth Area Strategy is an area of 120 ha, approximately two kms from the Perth CBD, and centred on the Claisebrook Inlet where its waters merge with those of the Swan River. The site is another of the Program’s waterfront rebirth Area Strategies. Historically it was a heavily industrialised area containing a gas works, sewage pumping station and electricity generating station amongst its polluting industrial activities. These activities meant that much of the land was in government ownership and was also under-utilised. The site required a complete reappraisal in terms of its remediation and establishment of new or upgraded infrastructure. The core of the strategy was to create an innovative urban village containing a diversity of activities including residential, educational, commercial and recreational. This a Category 1 project.

Objectives
The East Perth Redevelopment Authority established its own four key objectives (East Perth Redevelopment Authority 1998 Annual Report, p. 13):

- 'To rejuvenate the area;
- to rehabilitate the environment;
- to attract investment and expand the economic base, and
- to demonstrate advanced forms of urban development'.

The Report establishes a broader range of objectives (The Report, Vol. 1, p. 50):

- 'To substantially upgrade services and infrastructure and maximise use of existing physical infrastructure by increasing housing densities;
- to increase training and employment opportunities;
- to reduce traffic within the city by providing housing within walking distance of employment;
- to promote innovations and increase housing choice, affordability and proximity to employment centres, and public transport;
- to demonstrate energy efficient land development and medium density housing;
- to promote the urban village concept to revitalise the inner city;
- to encourage investment opportunities in the inner city area;
- to make better use of existing public transport modes and rationalise road transport;
- to act as a catalyst in promoting the process of urban renewal and increased levels of coordination between levels of government, the community and the private sector;
- to encourage joint participation between public and private sectors in the avenues of planning, and
to improve the urban environment and to recognise heritage values.

**Urban design evaluation**

The concept driving East Perth is that of an urban village. The identifying characteristics of an urban village are:

- ‘compactness, so that the village can be traversed by foot in a reasonable time - say fifteen minutes;
- a distinct identity, so that the limits of the village are easily understood in a visual and functional sense;
- a diversity of land use - residential, commercial, shopping and community - aimed at a high degree of self activity contained within the village, and the creation of activity aimed beyond normal business hours; a diversity of housing types, emphasising higher than average densities;
- opportunities for leisure as well as living and working;
- a high quality public realm, including adequate parklands, well designed and maintained streets and footpaths;
- public transport links to the city centre and other parts of the metropolitan region; more economic use of both social and physical infrastructure, and
- creates opportunities for community development.’ (Occasional Paper, Series 2, Paper 3, p. 90)

**Buildings and their grouping**

The building groups, regardless of the activities they house, are generally contained to four-sto- reys high, with a few exceptions rising to five or six. This height containment establishes a com- fortable human scale particularly suited to the ambience of East Perth, with its strong but not dominating built form. Whilst the site has a broad precinct basis the transition of one activity area to another is achieved without sharp ‘zoning-like’ changes thus reinforcing a relaxed ‘vil- lage’ atmosphere. The urban village concept is particularly successful in regard to this transition of activities with a kinship to many traditional villages where domestic, retail, religious and civic functions exist side by side in a seamless and convenient manner. (Mumford, L., 1966, p. 29) Although there is an array of what might be called contemporary architectural forms, contrib- uting to either variety or discordance depending on the viewer’s perspective, the use of buff coloured painted render and red brick, further strengthened by the plentiful use of the warm col- oured sandstone in the landscape works, contribute considerably to visual unity.

**Public domain**

The public domain is generous in extent, free flowing in form and rich in its variety. It includes access to both water and land, with a recreational marina in the former and generous and wel- coming spines, called greenways, and parks conducive to relaxation, in the latter. Other than the Gloucester Park Raceway at the southern extremity of the site there are no extensive places set aside for active sporting fixtures, and given the cost of the land and its development and the emerging nature of what might constitute an Australian genre of urban villages, this comes as no surprise. Details of the greenways and parks are explored further in Landscape.
Safety and security

In a general sense, and doubtless attributable in part to the remarkable quality of visual openness of East Perth, the Crime Prevention Through Environmental Design (CPTED) guidelines are well attended to.

It is difficult to find breaches in the issues of good sightlines for informal surveillance, opportunities for overlooking, the avoidance of entrapment spots in the absence of dense shrubbery for concealment and the other familiar CPTED principles. Working through the standard CPTED procedure for Risk Assessment also failed to produce any serious or potential shortcomings.

Activity

The activities on site include residential, commercial, retail, educational, an Advanced Manufacturing Technologies Centre, the State’s Technical and Further Education College, the IMAGO multimedia centre and mixed use development. Some of this activity is in three-storey developments combining a ground level of shops, a first floor of offices and a second floor of residential. As with many other of the Program’s Area Strategies the dominant activity is living and hence housing.

There is a diverse range of housing choice at East Perth. Numerically the provision is of the order of 1,000 housing units with a further 100 private homes and 50 affordable housing units. (18) Depending on the indice multiplier selected for households, say 2.5, this amounts to a population lying in the range 2,500 - 3,000. Constitution Hill is a demonstration housing development and there is community housing at Haig Park. Boan’s warehouse adds a further 50 apartments and the river-adjacent Belvidere (marketing spelling) contributes approximately a further 60 building sites. Adjoining the canal along Henry Lawson Walk are four-storey terrace houses - the fourth storey tucked under the roof - limited to a height of 12 metres and with a lot width of 6.7 metres, the latter dimension being considered generous.

These canal houses, or ‘Amsterdam’ houses in real estate parlance, are amongst the site’s most prestigious housing. Unfortunately, and even with design restrictions such as height, each house is determined to reflect the owner’s design predilections, with a result of near visual cacophony. Collectively, they demonstrate a neglect of past lessons whereby, despite individual owner’s design preferences, there was a substantial harmony in the design vocabulary, materials and construction methods. This lack of design coherence is disappointingly at odds with the powerful and unified setting of East Perth. Despite design guidelines there have been some unfortunate outcomes, one particular example in Arden Street of a pseudo-Italianate house slipping through the system. (19) Apart from these localised shortcomings in guideline outcomes, the detailed and demanding Belvidere, East Perth. Design Guidelines (East Perth Redevelopment Authority) holds promise for design control of this two-storey enclave. (Illustration 4.73 overleaf)
Boan’s warehouse is an excellent example of adaptive reuse. (Illustration 4.74 overleaf). The robust two-storey load bearing brick warehouse with a simple trussed timber roof has been skilfully converted to four stories of accommodation for both living and working without the doubling up of levels being expressed externally. The lit-from-above interior void provides access and space for car parking and pedestrian circulation without the parking being omnipresent. Whilst variously described as ‘New York apartments’ or ‘very Melbourne’ the transformation is singularly successful despite the real estate appellations. Other conservation and heritage initiatives include the preservation of the East Perth Cemeteries, the East Perth Primary School and the adaptive reuse of the Electricity and Gas Depot Number 6 Sub-Station to five ‘warehouse’ residential terraces.
Landscape

The landscape of East Perth is identified by two characteristics, that of the strength of its structural design and also its visual power.

The circulation spines, both pedestrian and vehicular, and pedestrian alone, exist in the wider context of linking East Perth and Subiaco (Perth Urban), but in an immediate and local sense they provide powerful organising elements to these individual Area Strategies. The parallel and adjoining road, path and water routes of Henry Lawson Walk transform to a path with an adjoining paving level sculptural and ‘gurgling cataract’ in moving from the residential area to a mixed-use commercial, residential and retail area. This transformation requires passing under an authentic Radburn-type traffic-separating bridge, being visually enlivened by sculptures, both in and out of the water, all of which ‘belong’ both by theme and construction. Such a modest walk in duration, becomes a superior urban experience. Macey Walk is another powerful spine in a residential area with high flanking walls, garden beds between walls and paving, and ‘nook and cranny’ seating. Paths in park areas, roads in residential areas and group car parking exhibit the same detailed design care and choice of both hard and soft plant materials. (Illustration 4.75 below and overleaf)
The extensive, indeed lavish use of Perth limestone in the landscaped works, provides both strength and continuity to the landscaping. The material possesses a strong, uniform, yellowish hue with a rough open texture with deep interstices. Its most remarkable property is that in a very short space of time, say two years, it presents a totally weathered look, and thus the landscaping has a mature and mellow appearance. This sense of well established landscaping is further strengthened by the planting of trees well advanced in their growth.

Accordingly, a considerable extent of the landscaped works provides an appearance of having been in place for many years. Claisebrook Inlet, renamed Claisebrook Cove in some of the documents, is flanked by two handsome parks where the inlet joins the Swan River. These parks, Gasworks Park to the north and Victoria Gardens to the south, are extensive, of interesting terrain, and continue to spill on either side of the inlet into contiguous linear water front parks. Again, as in the streetscapes, the integration of hard and soft landscape materials and the total integration of works of art including memorials to the Aborigines by way of murals, mosaic paving and narrative panelled stones are a tribute to the combined skills of the design team. Visually the landscape works are very satisfying. (Illustration 4.76 below and overleaf)
Chapter Four - The Case Studies

Gasworks Park

Illustration 4.76  The Parks - Victoria Gardens and Gasworks Park

Environment

East Perth exhibits a commendably high degree of north-south orientation, together with wide spacing between the built elements that minimises the prospect of overshadowing. The uniformity of north-south orientation also does much to strengthen the grain and legibility of the development. This orientation is not generally departed from, other than in limited cases, such as buildings facing onto the Swan River for reasons of maximising views and for buildings fronting roads slightly skewed off the east-west axis. Northern sun control, whilst not rigorously adhered to, has nonetheless received attention in the form of generous overhanging eaves, projecting balconies and in some cases custom designed sun-shading. There appeared no evidence of devices for capturing any cooling river breezes.

Ecological response

East Perth’s prolonged period as an industrial site with its gas works, sewage pumping station, electricity generating station together with the polluted Claisebrook main drain discharging into the Swan River added progressively to the site’s accumulated contamination and run-down, if not near derelict, presence on the edge of Perth.

The environmental clean up necessary to recover the site for totally new purposes was exemplary in the degree of its thoroughness and ecological response. For fifty years the East Perth Gasworks had produced town gas from coal before the plant was decommissioned in 1971.

Site investigations revealed a legacy of both solid and liquid waste, with solid contamination in some localities to a depth of 11 metres. Some of the waste products included: coal tars, pesticides, heavy metals, cyanides, carcinogenic phenols and ammoniacal liquor, sulphur and spent oxides. (Johnson, C. and S. Birch 1993, p. 14 and pp. 97-99) Studies revealed that the extent of contamination included the Swan River, the Claisebrook Drain, the foreshore, ground waters beneath the site and the site generally.

The clean up involved the gasworks site, Claisebrook Drain and dredging predetermined areas of the river bed adjacent to the gas works and as required for the inlet construction. The establishment of original river bed flora must be regarded as a major achievement. (20)
Circulation

In a macro sense East Perth required a number of specific issues to achieve its realisation as an urban village. These initiatives included the realignment of the City Northern Bypass to a new alignment parallel to the railway line to become the Burswood Bridge and Road. (Ratcliffe, M. 1993, pp. 14-16 and 116-128) The benefits of this action were to reduce the impact on nearby land use, take much of the unwanted through traffic out of East Perth and allow the introduction of bus lanes or high occupancy lanes to Perth and East Perth from the south east and east. Other initiatives included the minimising of through traffic; the incorporation of a pedestrian and cycleway network; adding support to the Metro rail system by increasing development near Claisebrook and McIver Stations; supporting the proposed inner city Transit System; investigating the potential for personal public transport and the introduction of parking policies to minimise the reliance of development on cars. Buses numbers 91, 92 and 95 serve the East Perth areas of Constitution Hill, Haig Park and South Cove. Ferry services into the cove are a future possibility. The internal site circulation patterns show a commendably equal concern with streetscape as with moving traffic. At a micro scale the pleasures of being a pedestrian are referred to in Landscape. East Perth provides an agreeable vehicular, cyclist and pedestrian environment with a minimum of conflict between these modes and with much of the site within the optimum 400 metres walking distance from public transport.

Public art

Public art at East Perth is an exemplar of high quality integrated works of art with an avowed attempt to acknowledge earlier Aboriginal presence on or near the site. Collectively they are a sincere attempt at respecting and marking the indigenous culture. Whilst the works of art are numerous a few examples illustrate their sensibility. The bold interpretive paved mosaic of the Bibbulmun dreaming in Victoria Park is the work of three young artists: Miv Egan, Sandra Hill and Jenny Dawson. In the same park, a 20m by 5m recessed niche wall mural depicts the development of East Perth with earth colours and Aboriginal figures. This powerful figurative mural is by Joanna Lefroy Capelle and David Brazier.

There is a dreaming track beside the Swan River designed by the Nyoongar artist Jerry Morrison. (East Perth 1998 Annual Report, p. 25)

It is named Ngango Batta’s Mooditcher meaning Sunshine’s Living Strength. Twelve granite stones stand along the track, representing 12 lakes that once existed between East Perth and Lake Monger but are now buried beneath the city. Each of the stones is named after one of the lakes, where indigenous people once lived and hunted. During the year inscribed plaques were installed on the stones to tell the story of an ancient culture.
There is separately a circle of six stones portraying the six Nyoongar communities of the Bibbulmun nation who lived on the river. Further public art works in the housing area are outlined under Landscape. (Illustration 4.77)
Social

While there is a modest provision of affordable housing, as a percentage of the total housing it is small. Affordable housing is provided for people on incomes substantially below the average. (Refer income thresholds for affordable housing in the Ultimo-Pyrmont Area Strategy Section 4.4.1). Most of East Perth is occupied by people well placed financially, if size and quality of their apartments and homes is used as an index. This observation leads to the conclusion that East Perth does not contain a representative cross section of the population, nor is there any indication that will be achieved in the future. This lack of social balance was disappointing, but this equally applies to a number of other of the Program’s Area Strategies also.

Management processes

There were two types of planning policies, one being the General Planning Policies directed to the scheme as a whole and particularly to secure the achievement of the urban village concept and the other being Precinct Planning Policies which are related to the detailed planning and the creation of each precinct’s individual character. The policies covered such matters as: housing, urban design, transport, security, energy conservation and public art. The policies are, ’reviewed and updated periodically and are enforceable under the East Perth Redevelopment Scheme.’ (East Perth Redevelopment Authority. 1998, Annual Report, p. 20-21)

Design Guidelines were prepared for all land in the Authority’s 1997-98 land sales program and applied as conditions in Contracts of Sale. The guidelines define detail such as set-back distances of buildings, height, materials, colour and building line.

Whilst the work was, and still is, under the guidance of The East Perth Redevelopment Authority (EPRA) the success of its outcomes must in considerable measure be attributable to the internal organisation of the design teams. The teams working on the project combined the skills of architecture, landscape architecture, planning and the arts. As well, the various landscape works were under the coordination of one person. The sense of design continuity, coherence and integration of this project must owe its success to these simple but exceedingly effective management decisions.

Conclusion

The desirable characteristics of an urban village outlined in the introduction to this Area Strategy have been well met by this carefully conceived and executed project. The few disappointments of East Perth are limited to those of the sometimes indifferent housing design, referred to in Housing, and the apparently limited social mix.
4.7.3 City Of Stirling Area Strategy

4.7.3 City of Stirling Area Strategy

Background
The regional centre of Stirling lies at the intersection of the Mitchell Freeway and the Stephenson Highway, approximately 10 kms north of Perth, and consists of the city’s administration facility and suburban retail. The area is identified as one of low intensity land use. The focus of the strategy was to provide a choice of affordable housing, a business and employment hub, an entertainment zone and the construction of a rail-bus interchange for those travelling beyond the regional centre. An overriding consideration of the strategy was to relieve the pressure on the Perth CBD. The field trip was focused on the rail-bus interchanges similar to those of Blacktown and Parramatta. This is a Category 2 project.

Objectives
- To create a suburban employment node which will sustain and promote greater use of public transport for the journey to work;
- to improve the efficiency of infrastructure by using spare capacity in the Stirling regional centre and collocating activities with complementary patterns of demand on roads, public transport and other services;
- to reduce congestion and excess infrastructure demands (for example, parking) in the Perth Central Activities District (CAD);
- to act as a catalyst for urban consolidation in the surrounding sub-region and thereby:
  - reduce demand for housing on the urban fringe;
  - reduce overall car dependence; and
  - provide greater housing choice.
- to improve access to community services, cultural and entertainment facilities, and
- to improve the urban environment and to preserve its heritage values. (The Report, Vol. 1, p. 53)

Urban design evaluation
The Stirling interchange has been effective in reducing journey to work times to Central Perth. The interchange provides good transport access for the immediate community as well as improving the region’s potential in attracting business.
Stirling Bus interchange

Buildings and their grouping

The design vocabulary of cantilevered steel roofs held by guyed tension rods is a dominant and unified architectural statement, and fits well with the building’s function. (Illustration 4.79)

Illustration 4.79 Stirling rail-bus interchange

Public domain

The entire interchange is predominantly one of the public domain.

Safety and security

The openness of the structure assists substantially with the maintenance of sight lines.

Activity

The activity is solely concerned with moving people safely and expeditiously.

Conservation and heritage

Conservation and heritage were not an issue in this development.

Landscape

Apart from some early planting on an embankment the area is devoid of any landscaped treatment, either integrated or stand alone.

Environment

Shelter from both sun and rain is provided by the generous cantilevered roof overhangs.

Ecological response

The same comment that was made for the Blacktown interchange applies equally here in the high degree of embodied energy in the structure.
Circulation

The bus set-downs, their circulation patterns and passenger connections to the railway station conformed with standard solutions of similar interchange facilities.

Public art

Apart from signage there was no evidence of public art including the traditional posters associated with rail and rail-bus interchange stations.

Social

The interchange is conceived predominantly, if not solely, as a ‘people-mover’ and hence softening influences of colour, landscape and public art, even if contained to posters, were considered redundant to its basic purpose.

Management processes

The criterion of management processes is not applicable as the sole management process is the safe and efficient movement of people which lies within the jurisdiction of the Rail Authority.

Conclusion

Whilst the interchange may function well it is singularly lacking in any concession to landscaped works, public art, use of colour and acknowledgment of ecological imperatives.
4.7.4 Perth Urban Area Strategy (Subiaco)

Illustration 4.80 Perth Urban Area Strategy map (The Report, Vol. 1, facing p. 52)
4.7.4 Perth Urban Area Strategy (Subiaco)

Background
The Perth Urban Area together with East Perth constitutes an extended linear urban development system on the Swan River linked by an inner city transit system. The strategy covers some 20 kms as a corridor from the eastern riverine areas to the Indian Ocean. The extended system embraces Subiaco, Bayswater and Ascot Waters. The strategy was based on employing under-utilised government land for redevelopment and urban regeneration, particularly as an enticement to the perceived virtues of inner city living, with its proximity to a transportation network and employment. Pedestrian ways and cycle paths received strong endorsement in the system, as too did site remediation particularly in the case of the sweeping riverside park of Ascot Waters located on a former rubbish tip and brick works. These are individually Category 2 projects.

Objectives
- ‘To upgrade services and infrastructure, maximise use of existing physical infrastructure, stabilise and remediate degraded and disused land;
- to increase economic activity and promote training and employment opportunities;
- to reduce metropolitan traffic growth and traffic within the city by a process of urban renewal which will provide more housing within walking distance of public transport and employment;
- to promote housing innovation and diversity, increase housing choice, and promote the development of more affordable housing;
- to demonstrate environmental sustainable and energy efficient land development and housing;
- to demonstrate the urban village concept as a means of revitalising physically and economically degraded areas close to the city;
- to encourage investment opportunities in the Perth Urban corridor;
- to make better use of existing public transport modes and improve public transport operations in the city area;
- to act as a catalyst in promoting the process of urban renewal and increased levels of coordination between levels of government, the community and the private sector;
- to encourage joint participation between public and private sectors in the avenues of planning, development and construction;
- to improve the urban environment and to preserve its heritage values, and
- to improve opportunities for pedestrian and cycle access between employment, residential and recreational areas within the Perth Urban corridor.’ (The Report, Vol. 1, pp. 56-57)
Urban design evaluation

Perth Urban, whilst somewhat in the shadow of East Perth in terms of the latter’s size, complexity and substantial support of public art, nonetheless acquits itself well by most of the evaluation criteria, and is therefore seen as a Category Two Area Strategy, but bordering on a Category One project. Whilst the site is generally part of Subiaco, the development is known as Subicentro.

The Bayswater Riverside Park, although an excellent example of a linear riverside public park, is a Category Two Area Strategy because of its limited scope.

Buildings and their grouping

At the time of the field inspection a number of the Subicentro buildings were still to be completed. At that juncture the only available references were models and site masterplans which held the promise of ordered open rectangular massing with courtyards at the centre. This tried and tested grouping is ideally suited to the proposed station precinct, the retail precinct and the commercial and business village. Some of the housing development is now well advanced. Given the nature of developer driven housing - even with design guidelines to inhibit the worst of design outcomes - the housing presents well, and is generally disciplined and mostly not at design odds with its neighbours. The demonstration housing is exemplary. The housing at Ascot Waters does not appear quite so successfully coherent as a group, as that of the Subicentro. (Illustration 4.81)

Illustration 4.81  Demonstration housing

Public domain

The public domain of Subicentro is largely coincidental with landscape. Apart from the road, footpaths and cycleways the Greenway is the dominant public realm and is reviewed in the Landscape section.

Safety and security

All of the three components of Perth Urban, including Subiaco, Bayswater and Ascot Waters enjoy a high degree of openness in the planning and urban design of their public domains. Such openness greatly assists informal surveillance. Subicentro with its wide uncluttered circulation spine, the extensive open spaces of Bayswater Riverside Park and the spacious landscaped plateaus of Ascot Waters all make a substantial contribution to public safety. As the Subicentro Station Precinct takes shape security and surveillance will be enhanced by the opening up of Station Square with archways through the surrounding buildings, again improving sightlines.
Activity

Subicentro comprises a number of planned activity areas. These elements are shown on the accompanying plan. (‘Subiaco’s first big land release in over 100 years’). The range of the elements and their juxtaposition, one to another, as well as their proximity to services, employment opportunities and the city largely justifies the Subicentro claim that it is an urban village, more so than similar claims of some other Area Strategies. Key activity elements are: housing, the Greenway, Centro Place, Centro Avenue, Market Square Park and Subiaco Square. (Illustration 4.82)

Illustration 4.82       Map of Subiaco

Housing

The main housing group is at the western end of the site, centred on the spine and positioned around the common and the lake providing generous recreation areas for the residents. There is a much smaller housing group at the eastern end of the site, also centred around the spine. Housing density in the vicinity of the Station Precinct will be higher than other residential areas in accordance with principles of transport oriented developments. Housing is referred to further in Management processes. (Illustration 4.83)

Illustration 4.83       Housing
Centro Place

Centro Place is the centre for commercial activities, and caters for the accommodation needs of professional groups and those involved in the media.

Centro Avenue

This boulevard provides a link with neighbours to the north. This link is of major importance as it is more than one hundred years since access to Subiaco has not been restricted by the Perth-Fremantle railway line.

Market Square Park

This park is associated with housing at the eastern end of the site, and is counterpoised to the western park area with its common and lake.

This is the heart of the redevelopment. The square is envisaged as a piazza surrounded by cafes, shops and apartments with the new railway station underground.

Ascot Waters

The completed Ascot Waters envisages, over and above the housing component, a number of facilities including: a community commercial centre, listed to accommodate historic kilns, retail and markets, office and a parkland setting; a separate commercial and mixed use associated with baseball and other sports; the Belmont International Baseball Stadium and the Ascot Marina Village with tavern, restaurant and local shopping located on the waterfront. In addition, and on the Great Eastern Highway, specialty shopping including showrooms, offices, commercial sports recreation and leisure facilities are anticipated. (Illustration 4.84)

Illustration 4.84 Ascot Waters

Conservation and heritage

Within the Subicentro area there were no examples found of heritage structures adapted to other purposes. However, recycled metal from the Humes building found its way into the public sculpture ‘Watershed’. (Subiaco Redevelopment Authority. 1977, Project Outlook, Vol. 3, p. 2). Conservation in terms of the natural environment was a major achievement at Ascot Waters.
Landscape

Subiaco

The spine-like Greenway through the development, expanding into park-like spaces along its length is very much in the manner of the spines described for East Perth. Similar elements of cataracts, generous path widths, sandstone retaining walls, occasional works of art and sensitively selected planting all indicate a similar design vocabulary to that of East Perth. Whilst the work is meritorious it does not achieve the design refinement of East Perth and its works of art are much fewer and not as fine as those at East Perth. (*Illustration 4.85*)

![Illustration 4.85 Circulation Subiaco](image)

Bayswater Foreshore Park

The City of Bayswater foreshore park redevelopment along the River Swan, with its embayments, beaches and extensive path network with amenities and picnic facilities transforms a previous unprepossessing despoiled river bank site into a fine public amenity. The sweeping expanse of lawns and the embayments, which are sometimes beaches and other times grass and reed beds down to the water’s edge, together with a jetty leading out into the river collectively contribute to a visually pleasing, recreationally versatile and safe public amenity. (*Illustration 4.86*)

![Illustration 4.86 Bayswater foreshore park](image)

Ascot Waters

The public marina waterfront spaces at Ascot Waters constitute expansive formally planned lawn and paved areas stepping down in level plateaus from the elevated housing level to the water’s
edge. This formal Italianate style landscape solution could be criticised as having pretensions beyond its residential context and marina purposes, but it is too adroitly handled and presents as a generous welcoming series of spaces despite its formality. (*Illustration 4.87*).

*Illustration 4.87  Map of Ascot Waters*

Collectively, all the landscaped works at the above centres of activity comprising the Perth Urban Area Strategy are well designed and executed.

Environment

The plan referred to in the section on Activity shows the general disposition of building groups. Within the constraints imposed by the north-east skewed Railway and Price Roads and Roydhouse and Hood Streets and their influence on the grain of the redevelopment there is an adherence to a north-south orientation of individual buildings and their sites. The Greenway spine and its accompanying stream and cataracts would doubtless have a beneficial microclimate cooling effect during Perth’s hot summer months. Protected balconies and entrance porches and appropriate roof overhangs indicate a considered design response to the elements.

Ecological response

All three components of the Perth Urban Area Strategy necessitated site preparation of varying degrees. Ascot Waters required major rehabilitation in the re-establishment of water channels, indigenous riverine species and wildlife refuge and habitat areas for water birds and other fauna. This ecologically sensitive area, and its recovery lies between the Ascot Waters development and the Swan River, and was seen in the context of how ‘an urban renewal project could create habitat and strengthen, not weaken, a natural riverine system’ (Singleton, J. & Le Provost, I. *Ascot Waters And The Swan River*, p. 1).
The complexity of the undertaking was increased by previous activities of the area being both a tip site as well as a source of clay from the then active clay pits. At the neighbourhood level the Authority requires, for residential development, a score of at least 4 stars if the proposal is assessed under the National House Energy rating scheme. The alternative to this is the fulfilling of an extended list of environmental and ecological criteria. The criteria include a reduction of resource requirements and the encouragement of non-energy intensive transportation, maximising solar access, the incorporation of water sensitive design issues and matters covered in the Environment section of this evaluation.

Circulation

The dominant revision to the existing movement infrastructure was to the existing railway line. The Perth to Fremantle railway line between Haydon Bunton Drive and Hay Street subway was moved approximately 50 metres north and lowered some six metres in order to run through a tunnel. The sinking of the 800 metre stretch of railway removed the physical barrier between Subiaco and the surrounding areas of Jolimont and Wembly. This allowed the construction of new roads, footpaths and cycleways thus integrating the development with Rokeby Road, the traditional heart of Subiaco. The land above the underground railway station is to be become a special precinct known as Station Square, an area for both living and working, consisting of three-storey mixed use buildings surrounding the square.

Public art

There exists a Public Art Plan for Subicentro derived from extensive community consultation. For the plan to be comprehensive it requires the incorporation of public art into the landscape, play areas, lighting, signage and buildings, yet at the time of the field inspection there was limited evidence that this was in place. Works envisaged are wide ranging, and include: sculpture, a walktrail, documentary photographs, paving, furniture, temporal and changing art as well as street performances.

As in the case of East Perth, the Plan envisages that the artists will work collaboratively alongside the design team to ensure that outcomes are integral with landscape and built works. The commissioned works will, in the main, enhance the public domain, and in particular the Greenway and Station Square. Given that the preceding elements of the Plan indicate a sound foundation for public art, it will require further waiting to determine if fulfilment of the Plan eventuates.

Social

One of the objectives of the Subiaco initiative was to balance and complement the existing community fabric. The following tabulation indicates that so far this is in progress but will await the ‘completion’ of the project before any discernible shifts might be detected. (Subiaco Redevelopment Authority. 1997/98. Annual Report, p. 28)
Indicator - The change in size and composition of the residential population of the Subiaco Redevelopment Authority neighbourhood.

The planning ‘context area’ for Subiaco Redevelopment Authority is the neighbourhood within roughly 1 km of the boundaries of the redevelopment area. This area had a total population of 17,000 at the 1991 Census and 16,000 at the 1996 Census and a household structure as follows (ref: ABS, 1991 and 1996 Census)

<table>
<thead>
<tr>
<th></th>
<th>1991</th>
<th>1996</th>
</tr>
</thead>
<tbody>
<tr>
<td>One Parent Families</td>
<td>8%</td>
<td>7.7%</td>
</tr>
<tr>
<td>Couples No Children</td>
<td>21%</td>
<td>20.6%</td>
</tr>
<tr>
<td>Two Parent Families</td>
<td>20%</td>
<td>18.9%</td>
</tr>
<tr>
<td>Families of Other Related Individual</td>
<td>2%</td>
<td>1.8%</td>
</tr>
<tr>
<td>Group Households</td>
<td>11%</td>
<td>9.1%</td>
</tr>
<tr>
<td>Lone Person Households</td>
<td>38%</td>
<td>41.9%</td>
</tr>
</tbody>
</table>

These figures will be a benchmark against which the characteristics of the new community in the redevelopment area will be compared as it becomes established.

Such a monitoring of the social mix would be a valuable exercise for any such major interventions into an existing urban fabric.

Management processes

The revitalisation of Subiaco is being guided by the Subiaco Redevelopment Authority, established under *The Subiaco Redevelopment Act 1994*, which is responsible to the Minister for Planning.

The functions of the Authority are to plan, undertake, promote and coordinate the development and redevelopment of 80 hectares of inner city land within a defined area of Subiaco. The Authority is required to prepare and keep under review a Redevelopment Scheme for the area and to control development in the area. The Act gives the authority power to deal in land and other assets and undertake works in the area. (Subiaco Redevelopment Authority 1997/98 Annual Report, p. 10)

At a design level, the site design guidelines for the Salvado Road Precinct are thoughtfully considered, compact and accessible. The site is the initial land release area, comprising some 189 lots directly north of the Greenway spine common and pond fronting onto Salvado Road. The guidelines document is comprehensive and covers in detail the following categories: housing in Subicentro, the area covered by the guidelines, site planning, building form, materials, landscaping, approvals and other considerations such as site services, lighting and fencing. In comparison with East Perth the housing appeared to have avoided the more blatant examples of individual adjacent houses vying for attention. The Subicentro housing collectively contributes to a more harmonious streetscape than some of East Perth’s residential work. In both Subicentro and East Perth the housing is two-storey or more, and up to four in the case of the latter, with high site coverages on small blocks.

Given these constraints, they lend reinforcement to ensuring that such close adjacencies are at least visually compatible in design terms. The Subicentro demonstration housing is well above the average developer design norm.

It is to be hoped that the quality of the site design guidelines were influential in these improved outcomes.
Conclusion

The redevelopment of Subicentro in many ways is a model of what can be achieved in urban revitalisation. It contains a number of the contemporary concepts and tools of urban design, such as the urban village, a transport oriented development (TOD), a contiguous public domain in the form of a circulation spine - the Greenway, and an adherence to urban consolidation. All these components are well integrated to present a good urban design outcome and a model for further study.
4.7.5 Fremantle Area Strategy

Illustration 4.88 Fremantle Urban Area Strategy map (The Report, Vol. 1, facing p. 56)
4.7.5 Fremantle Area Strategy

Background
The Fremantle Area Strategy includes the City of Fremantle, East Fremantle and Melville and the adjoining suburbs of Palmyra, Hilton and Hamilton Hill. The port of Fremantle is seen as a regional centre for commercial activity for the area and the south-west corridor. The strategy is focused on under-utilised land for increasing urban densities, providing increased housing types and hence choice, and in reducing sprawl. This program of essentially urban consolidation carried with it upgraded infrastructure services, particularly those of stormwater, sewerage and water recycling systems. The two particular components evaluated were the ecologically-based water management systems at Palmyra and the adaptive re-use of West Australian Newspapers Ltd former premises. Because of its scattered nature the Fremantle Area Strategy is a Category 2 initiative.

Objectives

- 'To reduce the net cost of urban growth through improved use of land and available infrastructure in established urban areas;

- to provide increased availability of housing choice, including public/private housing which was affordable and having an appropriate variation in density;

- to provide infrastructure services to areas which are under serviced, to support medium density housing;

- to improve the planning process by coordination of all levels of government and the private sector through the demonstration factor of strategic residential developments in the area;

- to provide an alternative to housing on the urban fringe and to demonstrate the viability of urban renewal, consolidation and area management to provide housing options, and

- to improve the urban environment and to preserve its heritage values.' (The Report, Vol. 1, p. 55)

Urban design evaluation
The individual components of this Area Strategy were focused on a number of ecologically-based infrastructure and housing initiatives, including the adaptive reuse of a previous industrial premises of West Australian Newspapers to housing. These individual components were:

- the construction of an innovative road drainage system whereby water is filtered back into the aquifer through swales in the road verge;

- the construction of medium density housing development with a demonstration on-site grey water recycling plant which utilises recycled waste water through the toilets;

- the construction of a sewerage pump station at Dixon Park Reserve to enable the intensification of housing;

- demonstration medium density public housing at Hamilton Hill and Hilton, and
the adaptive reuse of West Australian Newspapers Ltd to residential accommodation.

Buildings and their grouping

The Palmyra housing was well grouped to create privacy for occupants, although most of the private or semi-private spaces were hard paved for vehicle and pedestrian circulation and parking. The housing was well designed. (Illustration 4.89)

[Illustration 4.89] Housing at Palmyra

The forming of the courtyard housing of the West Australian Newspapers Ltd was assisted by the simple, basic and adaptable construction of the original buildings.

Public domain

The public domain criterion is applicable to the occupant shared internal landscaped courtyard of the West Australian Newspapers Ltd housing which achieved a pleasant space. The public domain of Palmyra housing is largely given over to vehicular circulation and parking.

Safety and security

Given the courtyard configuration of West Australian Newspapers Ltd housing, issues of informal surveillance were well provided for.

Activity

The central activities to this Area Strategy evaluation are the Palmyra housing initiative and the adaptive re-use of West Australian Newspapers Ltd.
Conservation and heritage

The conversion of the previous West Australian Newspapers Ltd to housing is an excellent example of adaptive reuse. The contemporary ‘industrial detailing’ complements well the ruggedness of the basic structure. *(Illustration 4.90)*

![West Australian Newspapers Ltd housing](Image)

**Illustration 4.90** West Australian Newspapers Ltd housing

Landscape

The criterion of landscape applies only to those housing initiatives chosen for evaluation in this Area Strategy. In the limited space available, West Australian Newspapers Ltd housing has achieved a central spinal walkway - an internal ‘street’ - with small adjoining walled private spaces. Within the modest resources of paving, lawn and shrubs it is a pleasant and ordered result. The solution constitutes an effective sharing of limited space between public circulation and private enjoyment, even if somewhat pared down in the case of the latter. *(Illustration 4.91)*

![West Australian Newspapers Ltd landscape](Image)

**Illustration 4.91** West Australian Newspapers Ltd landscape

Palmyra housing with its tight shared vehicle circulation and parking combined with pedestrian circulation and access has forced the landscaped works into tight areas of lawn with shrubs pressed against the individual houses. Such a landscaped outcome was observed in similar hous-
ing situations such as Northhaven at South Australia; Tolsa Street, Hobart, Tasmania; and elsewhere in a number of the Program’s Area Strategies. In these situations it is inevitable that landscape assumes a diminished role in the design outcome. *(Illustration 4.92)*

*Illustration 4.92*  
**Landscape at Palmyra housing**

**Environment**

In Palmyra and West Australian Newspapers Ltd housing there was token acknowledgment in terms of protection from the elements by way of protected entry porches at Palmyra and sun hoods over some of the doors giving access to the courtyard balconies. The balconies in turn provide some protection to the external openings in the floor below. *(Illustration 4.93)*

*Illustration 4.93*  
**West Australian Newspaper housing - environmental protection**

**Ecological response**

The Report stated that the Palmyra initiative incorporated a trial greywater treatment plant although the field trip did not reveal its presence. A drainage management scheme provides for
a system of swales in the street verges which in turn feed a system of nutrient-stripping bores through which water returns to the aquifer. (*The Report*, Vol. 1, p. 56). ‘Development guidelines (to) promote energy efficiency house designs’ were also part of the ecological response for this development. (*ibid.* p. 56)

Circulation

The circulation criterion was not applicable in terms of both macro and micro modification to road infrastructure.

Public art

No evidence of public art was found.

Social

From the evidence gained from on-site discussions with the residents at the West Australian Newspapers Ltd housing it appeared that part of the development was private and the remainder social housing. If this is so, and ‘them and us’ comments would indicate this was the case, then this is a bold venture into mixed development which some of the State Housing authorities are still to come to grips with.

Management processes

Management processes were not an issue in this development.

Conclusion

This is a fragmented Area Strategy, but the components selected for evaluation proved to have an internal coherence in urban design terms that was not discernible in the Area Strategy as a whole.